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P R O P O S A L
For UNIFORMITY of
WEIGHTS and MEASURES
I N
S C O T L A N D.

P. R. O. P. O. S. I. T.

FOR UNIFORMITY OF

WEIGHTS AND MEASURES

SCOTLAND

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P R O P O S A L

For UNIFORMITY of

WEIGHTS and MEASURES

I N

S C O T L A N D,

By execution of the Laws now in force.

W I T H

TABLES of the English and Scotch Standards, and of the customary Weights and Measures of the several Counties and Boroughs of Scotland; — COMPARISONS of the Standards with each other, and with the County-Measures; — TABLES and RULES for their reciprocal conversion; — and some TABLES of the weight and produce of corn, &c.

A D D R E S S E D

To his Majesty's Sheriffs and Stewarts Depute, and Justices of Peace, of the several Counties and Stewartries, and to the Magistrates of the Royal Boroughs, in Scotland.

E D I N B U R G H :

Printed for CHARLES ELLIOT, Parliament Square.

M D C C L X X I X.

THE
OFFICE
OF THE
SECRETARY
OF THE
NAVY
WASHINGTON
D. C.
1914

1. The Secretary of the Navy has the honor to acknowledge the receipt of your letter of the 10th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

2. It is the policy of the Department to maintain the highest standard of efficiency in the selection and promotion of officers and enlisted men, and to ensure that all appointments are made on the basis of merit and fitness.

3. The Department is constantly endeavoring to improve the methods of selection and promotion, and to ensure that all appointments are made on the basis of merit and fitness.

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Tab

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8

9

10

11

12

13

14

15

16

17

18

19

20

C O N T E N T S.

	Page.
Proposal for Uniformity of Weights and Measures in Scotland.	x

G E N E R A L T A B L E S.

Table

1. <i>Engliſh meaſures of Length,</i>	23
2. <i>Scotch meaſures of Length,</i>	24
3. <i>For converting Scotch Ells into Engliſh Yards, and Engliſh Yards into Scotch Ells,</i>	25
4. <i>Engliſh Square meaſure,</i>	26
5. <i>Scotch Square meaſure,</i>	ib.
6. <i>For converting Scotch Acres into Engliſh, and Engliſh into Scotch,</i>	27
7. <i>Engliſh meaſures of Capacity for Liquors,</i>	28
8. <i>Scotch meaſures of Capacity for Liquors,</i>	29
9. <i>For converting Engliſh Wine Gallons into Scotch, and Scotch to Engliſh,</i>	30
10. <i>For converting Engliſh Gallons of Ale and Beer to Scotch, and Scotch to Engliſh,</i>	ib.
11. <i>Engliſh meaſures of Capacity for things Dry,</i>	31
12. <i>Scotch meaſures of Capacity for things Dry,</i>	32
13. <i>For converting Standard bolls of Wheat, &c. into Wincheſter buſbels and quarters, and theſe into bolls,</i>	34
14. <i>For converting Standard bolls of Barley and Oats into Wincheſter buſbels and quarters, and theſe into bolls,</i>	35
15. <i>The Cubical Feet in various liquid and dry meaſures,</i>	36
16. <i>Engliſh weight,</i>	ib.
17. <i>Scotch Weight,</i>	38
18. <i>Amſterdam Weight,</i>	39
19. <i>Paris Weight,</i>	40
20. <i>Comparative table of weights,</i>	41
21. <i>For</i>	

Table	Page
21. For converting Avoirdupois pounds into English Troy pounds, and these into Avoirdupois, -	43
22. For converting Scotch Troye pounds into English, and English into Scotch Troye, -	44
23. For converting Standard Scotch Troye pounds into Avoirdupois, and Avoirdupois into Scotch, -	45
24. For converting old Scotch Trone pounds into Avoirdupois, and Avoirdupois into Trone, -	46
25. For converting old Scotch Trone pounds into Standard Scotch Troye pounds, and these to Trone, -	47
26. Weight of various measures of river water, -	48
27. Weight of Wheat, -	49
28. Of the Flour produced from Wheat, and also of the Bread from Flour, -	50
29. Of the weight of Barley, -	51
30. Weight of Oats, and of the Meal produced from Oats of different qualities, -	52

COUNTY-TABLES.

Aberdeenshire, - - -	53
Argyleshire, - - -	55
Ayrshire, - - -	57
Banffshire, - - -	62
Berwickshire, - - -	64
Buteshire and Arran, - - -	66
Caithness-shire, - - -	68
Clackmannanshire. See Stirlingshire.	
Cromarty. See Ross-shire.	
Dumbartonshire, - - -	69
Dumfriesshire, and part of Kirkcudbright Stewartry, -	72
Edinburghshire, or Mid-Lothian, - - -	75
Elgin and Forres shire, - - -	77
Fife-shire, - - -	79
Forfarshire, - - -	81
Forres. See Elgin.	
Haddingtonshire, - - -	84
Inverness-shire, - - -	86
Kincardineshire, - - -	89
Kinross-shire, - - -	91
Kirk-	

CONTENTS.

vii

	Page.
Kirkcudbright Stewartry,	93
Lanarkshire,	96
Linlithgowshire,	99
Nairnshire,	101
Orkneys and Zetland,	104 & 107
Peeblesshire,	108
Perthshire,	110
Renfrewshire,	113
Ross and Cromarty shire,	115
Roxburghshire or Teviotdale,	117
Selkirkshire,	119
Stirlingshire and Clackmannanshire,	121
Sutherlandshire,	124
Wigtonshire,	127
Zetland. See Orkneys.	

Conjectures concerning the Ancient Weights and Measures in Scotland, from the time of David I. downwards, 131

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ADDITIONS and CORRECTIONS.

Page 21. after line 7. insert

There is subjoined a conjecture concerning the ancient weights and measures of Scotland, from the time of David I. downwards.

Page 29. line 10. in place of 206.088 read 206.808

Page 33. line 4. after lost. add See Perthshire weights.

Page 33. line 5. after Rates add printed in 1670,

Page 43. at the top of column 2. after English Troy add Pounds.

Page 60. line 9. in place of The above boll read The above firlo. — This error having been observed before all the copies were printed, is corrected in some of them.

Page 113. line 23. after rates add printed in 1670.

Nota. In the County-Tables (p. 53. — 130.) there is subjoined to each a Rule for converting the County-Measures into Scotch and English Standards; but no rule was thought necessary for converting the Standards into County-Measures, because it is obvious, that whatever number, used as a multiplier of the county-measures, converts them into Scotch or English Standards, will, if used as a divisor of the Standards, convert them into County-Measures.

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P R O P O S A L

For uniformity of

Weights and Measures in Scotland.

THE advantages of uniformity in weights and measures are so great, and so general, that it has been an object of the legislature in every commercial kingdom.

In England, from *Magna Charta* down to the present time, there are above fifty acts in the statute-book concerning weights and measures.

In Scotland, since the *Affisa* of King David I. there are above forty acts of parliament upon the same subject.

About the year 1756, a committee of the House of Commons was appointed "to enquire into the original standards of weights and measures in England, and to consider the laws relating thereto; and to report their observations thereupon, together with their opinion of the most effectual means for ascertaining and enforcing uniform and certain standards of weights and measures to be used for the future."

This committee, taking the assistance of able artists and ingenious men, made a laborious and accurate comparison of the several standards of weights and measures accounted the standards; but which differed considerably from one another. By this comparison they ascertained the true medium standard. They also considered the whole laws relative to weights and measures, and came to

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several

several resolutions, expressed at length in two reports made by them to the House of Commons in 1758 and 1759. Upon these reports, which contain the whole history and state of the English weights and measures, and the material laws concerning them, two bills were brought in to the House of Commons in the year 1765. The first is intitled; "A bill for ascertaining and establishing uniformity of weights and measures throughout the kingdom of Great Britain," &c. The second is intitled, "A bill for enforcing uniformity of weights and measures to the standards thereof by the law to be established."

These bills set forth in the preamble, "That it was necessary, for the security of commerce, and for the good of the community, that weights and measures should be just and uniform; and that, notwithstanding it is enacted by the great charter, That there shall be but one measure and one weight throughout the realm; yet different weights and measures, some larger and some less, are in use in different parts of this kingdom, and the true measure of the present standard is not readily known, which is the cause of great confusion and of manifest frauds. For the remedy and prevention of these evils, and to the end that certain standards of weights and measures should be established, and uniformity and obedience thereto should be enforced, it is proposed, by the first bill, to be enacted, in substance,

1mo, That a straight brass rod, made by direction of the committee, shall be the original and genuine standard *yard*, and the unit, or the only standard measure of extension, wherefrom or whereby all other measures of extension, whether lineal, superficial, or solid, shall be derived, computed, and ascertained; and the parts, multiples, and proportions thereof, in lineal, superficial, and solid measure, including also the measure of things liquid are set forth and declared.

2do, That the piece of fine copper, made by direction of the committee, and described in the bill, shall be the original and genuine standard of that weight called the *Troy pound*, and shall be the unit and only standard measure

measure of weight, from whence all other measures of weight shall be taken and derived; the parts, multiples, and proportions whereof, are set forth and declared in the bill.

3^{tio}, The bill provides and declares what proportion Avoirdupois weight bears to Troy weight, and annexes a table thereof.

4^{to}, That the said standard Troy pound, and the said standard yard, shall be deposited and remain for ever in the court of Exchequer.

The bill goes on to direct, That copies and models of these standards shall be made, and that there shall be commissioners for the assizing and adjusting of weights and measures; and proposes several regulations for these purposes: and lastly, proposes a repeal of the whole statutes in being for ascertaining or establishing standards of weights and measures.

The second bill, "*For enforcing uniformity,*" &c. proposes, 1^{mo}, That all contracts, bargains, sales, and dealings, for any goods, wares, or merchandises, or other things sold, delivered, done, or agreed for, by weight or measure, shall and ought to be taken and adjudged, according to the respective standards and measures established by law; and that no person shall in any action or suit recover the price, or the goods, or damages for non-performance, or by reason of any contract, bargain, &c. sold, delivered, done, or agreed for, by weight or measure, but only according to the legal standards; and that no person shall have in his custody, for use, any weight or measure not conformable to the standards, under a penalty, &c.

2^{do}, That no person shall make any other weight or measure under a penalty; with various other regulations for the preventing and punishing of frauds, and for the better carrying the law into execution.

3^{tio}, That whereas the measures by which the rates and duties of the customs and excise, and other revenues, are collected, are different from the measures

of the same denomination proposed by the bill to be universally used through the realm, whereby his Majesty's revenue may be affected; therefore accurate tables for adjusting the several rates and duties of the respective quantities according to the legal standards, are prepared, and annexed to the bill.

These bills were printed, and laid over, with a view that the public might have an opportunity of canvassing them, and suggesting proper additions and amendments. It was agreed, that certain clauses should be inserted for including Scotland, which had not originally been in the contemplation of the committee. But much is it to be lamented, the subject has not again been resumed by the House.

While this subject was under the consideration of the House of Commons, an idea was suggested, that one of the great causes of the inefficacy of the many laws for establishing standards, and directing uniformity, was, the difficulty of carrying them into execution, without accurate tables for converting the customary weights and measures into the standards.

The necessity of such tables is very obvious. People who use, for the same purposes, measures differing both in size and name, speak as it were different languages; and it is not enough to make a law appointing all persons to speak the same language in that respect, without also making some provision for teaching them to do so. The case is even worse where the different weights or measures have the same names; for unless they who have occasion to use them, are not only ascertained that they speak of different things, though under the same names, but also are taught where the difference lies, and how great it is, they are led unwittingly into great deception. As, for instance, the boll is the general measure for corn over all Scotland; yet, it may be said, there are hardly two counties in Scotland where the boll-measure is exactly the same, and there are some counties where the boll contains more than double what it does in others. The Trone weight,

weight, commonly called the *wool weight*, falls under the same observation. So, unless people are apprised of the differences, and taught how to convert the several weights and measures readily into one another, it will ever be a vain project to expect general conformity to the law. For that purpose, tables should be formed by public authority, and put upon public record.

This plan is necessary for another reason; namely, that it would be improper to destroy the memory and knowledge even of the weights and measures intended to be laid aside; because, without that knowledge, ancient rights, ancient trade, and ancient history, could not be understood.

The proper manner of ascertaining and preserving the knowledge of ancient weights and measures is by statutory record; and therefore such tables as have been mentioned would be the best manner of such a record.

It is not proposed, nor is it indeed possible, to extend such tables to every barony, or to every parish, although there are differences of weights and measures almost in every parish and barony in this kingdom. This would be an unnecessary minuteness; for although such differences do exist, yet they are often very small, and their proportions to the county weights and measures are generally known within the county: therefore, if the medium of counties or large districts of counties be taken as near the truth as can easily be got, it would sufficiently answer the different objects of the law, and the several purposes of commerce.

To accomplish even this is a work of time; but is far from being impossible. Till it is done, it may be prognosticated, from past experience, that an act for uniformity would not probably have effect. The advantage of such a law is so great, that it is to be hoped the same public spirit which carried the matter so far in the year 1765, and by which the true standards were actually made, and are now in public custody, will be revived, and this great commercial object brought to compleat maturity.

But

But though these hopes may be distant, in so far as concerns the obtaining one new compleat act for settling the standards, and enforcing uniformity, in place of the various laws now in being; yet certain it is, that judges and magistrates have, by the present law, a great deal in their power for enforcing uniformity to the present standards. These laws are intricate only by their multiplicity; and the execution of them is difficult for want of such tables of conversion as have been above described. Magistrates have it in their power to employ fit persons to make such tables, and to perfect them by degrees, (for they cannot be compleatly done at once), and afterwards to circulate them for public use. So soon as such tables shall come to be publicly known and understood, the task of the magistrate will be more than half done. Seeing the benefit of uniformity, most people will be desirous to embrace it; and should there be a few obstinate, and tenacious of old customs, they will be carried with the tide, and can have no pretence for complaining should they be compelled to lay bad customs aside.

The object of this paper is to show, that a great deal may be done by the present laws; and to suggest what appears to be the simplest and easiest method of carrying them into execution. This would be of great consequence in the mean time, and might pave the way for a new and compleat act of parliament, if not for Great Britain, at least for this part of it.

In this view, it is unnecessary to discuss the propositions that have been made by learned men for obtaining one certain and invariable standard, to answer for all nations. It is enough for the purposes of our commerce to bring all the weights and measures of this part of the kingdom to one certain standard, lodged in public custody.

It will be unnecessary also in this place to enter into the history of our weights and measures at different times, and to discuss the several laws that have been made concerning them. It will be sufficient in the present view to give a brief account of such of our acts of parliament

on this subject as are understood to be now in force and use, and to point out particularly the clauses in them which direct how they are to be executed, and afterwards to suggest how that execution may be accomplished by means of such tables as have been described.

Many laws having been made, as has been mentioned, concerning just weight and measure, but not being duly observed; by an act in 1491, James IV. parl. 4. cap. 47. it is statuted, "That they that use false weights and measures, deceiving the people, shall be indicted as falsars, and dittay taken thereof by the Justice-Clerk."

By an act in the 19th parliament of James VI. in 1607. cap. 2. upon the recital, That there had been great negligence in putting the acts of parliament concerning weights and measures to due execution, it is statuted and ordained, "That sheriffs, stewarts, and magistrates of boroughs, shall put the former acts in execution, &c.; and that they shall have power to take trial of false metts, weights, and measures, and the users of the said false weights to amit and tine their hail goods and gear, which were to be forfeited for the King's use."

Ten years afterwards, in 1617, Justices of Peace, that useful set of magistrates, were established by act of James VI. parl. 22. cap. 8.

By the 22d clause of that act, it is ordained, "That there shall be but one just measure and weight through all the parts of the kingdom, for selling, buying, receiving, and delivering."—And for settling a method for reducing measures and weights to uniformity, certain commissioners were named, and they were directed to communicate their determinations and proceedings to the justices of peace, and to the deans of guild, to the end the same might have course through all parts as well borough as landward.—And that there might be one constant conformity betwixt burgh and land, it is ordained, "That the justices of peace take trial of the measures and weights used in burgh, and take a note from the magistrates and deans of guild of every town, of the weights and measures, and of the number thereof, which the said magistrates and deans of guild
" in

“ in burgh, shall be holden to shew, declare, and give
 “ up to them, to the effect the said justices may confer
 “ (compare) the same with the standards now authorised ;
 “ and where they find any disconformity in the same
 “ from the said standard, the said justices shall inform
 “ the King’s Majesty’s council thereof, that they may
 “ take order therewith as appertaineth : for it is express-
 “ ly provided, by these presents, that the said magistrates
 “ in burgh shall not be permitted to have or use any
 “ more measures within their towns than the number to
 “ be professed by them, and given up in writ to the said
 “ justices.”

This article and regulation is verbatim repeated in the act of 1661, Charles II. parl. 1. session 1. cap. 38. intitled, “ Commission and instructions to the justices of peace.”

In consequence of the commission granted by the act of 1617, the commissioners appear to have taken uncommon pains in ascertaining and settling the several standards of weight and measure, the particulars of which are set forth in the general tables annexed, and need not be here specified, farther than that the commissioners, *first* of all, made the ell of Edinburgh the unit of lineal measure, and committed the keeping of it to the city of Edinburgh.

2dly, They made the Stirling pint or jug the unit of liquid measure ; and, what well deserves notice and imitation in every attempt of this sort, they ascertained it by the weight of water which it contained. This standard jug was committed to the keeping of the borough of Stirling.

3dly, They made the firloft of Linlithgow the unit for dry measure of wheat, rye, beans, pease, meal, and white salt ; and they not only settled its form and dimensions, but also declared the number of pints which it ought to contain. And as malt, barley, and oats, had before that time been in use to be measured by heaping the same firloft, they thought it more expedient to calculate how much the heap added to the measure, and to make a separate firloft for oats, barley, and malt, which being struck, should exactly contain the same quantity as the

the other firloot when heaped. This they did; and in like manner as they had done with the wheat-firloot, they fixed the form and dimensions of the oat-firloot, and ascertained it by the number of Stirling jugs or pints which it contained. These firlots they committed to the keeping of the borough of Linlithgow.

The commissioners, by ascertaining the weight of water contained in the Stirling pint, and the number of pints contained in each of the firlots, most judiciously intended to make weights and measures mutually ascertain and check one another. But notwithstanding this judicious intention of the commissioners, the dimensions fixed by them for the respective firlots do not appear sufficient to hold the number of pints which they are declared to contain. The difference between the English and Scotch inches, and the difference between the Paris and Scotch pounds, (if our pint was regulated by Paris weight, for which see Tables annexed), being both taken into computation, will not make the firlots large enough to hold their respective pints. Probably due pains were not taken in gauging them; or they may have been rudely constructed. Indeed, it is clear, some oversight has been committed in the gauging; because the error on one of the firlots is much greater in proportion than the error on the other, which could not have been the case, had it been altogether owing to any difference in the pint used in 1618, from the standard pint now in use. To make the measure by gauge tally with the pint, the wheat-firloot ought to be 7.617, and the barley-firloot 11.113 English inches deep, and both of them as in the act of parliament, of 19 $\frac{1}{8}$ inches diameter, and equally wide throughout.

4thly, With respect to weights, they declared the French Troye stone weight to be the unit, and committed that stone to the keeping of the borough of Lanerk, and declared that the weight called of old the *Trone* weight should be utterly abolished and discharged for ever.

They ordered double standards of all these weights and measures to be made, and that two of every one of them should remain in the register in the castle of Edinburgh,

and other two within the castle of Dumbarton, therein to remain as a warrant for the measures and weights. The other doubles deposited with the four boroughs above mentioned, were to be used for the assizing of weights and measures to be delivered under the mark of these boroughs, for public use.

They made a proviso, That where persons had right to payments by the old measures or weights, they should be proportioned to the weight and measure now established, so that no person might suffer any prejudice.

They declared, That the new weights and measures, and no other, should be received and used; and that all firlots to be used in markets should be burnt, and sealed either with the marks and seals of Linlithgow, or with the burning-iron of the head borough of the shire where in the markets are holden; "and that the provost and
" bailies of royal boroughs and cities, both of regality and
" royalty, and also the bailies in boroughs of barony
" and justices of peace, in whatsoever places where mar-
" kets of victual are holden, or other foreign or country
" wares are bought, sold, and weighed, met and mea-
" sured, shall be bound, that all measures and weights to
" be used, shall be of one form and quantity, according
" to this present act; and if any different weights and
" measures be found in any of the places above mention-
" ed, the said provosts, bailies, and justices of peace
" shall take order therewith; and, if need be, shall be
" holden to inform the King's Majesty's council thereof
" that they may take order thereanent as appertaineth."

For the security of those who, by old infestment contracts, or tacks, had right to receive by other measures and weights than those then established, the commissioners directed, That the proportions which these old weights and measures bore to the new, should be fixed and ascertained: and for preventing law-suits concerning bargains made before the act; and because it appeared, that in the sheriffdoms of Lanerk, Wigton, Dumfries, Roxburgh, and Berwick, there was evidently the greatest variety of measures and weights from the standards then established; and that, if these five shires were brought

conformi

conformity, the rest of the shires would easily be reduced to the same: therefore the commissioners found it expedient, and it was ordained, "That the sheriffs of these five shires should warn the bailies of regalities, stewarts of stewartries, justices of peace, and magistrates of boroughs, within their respective shires, to meet in the head borough of the shire where they are magistrates, within twenty days after the council's pleasure shall be signified to them thereanent, and there not only to receive and embrace the said measures and weights from the burghs of Linlithgow and Lanerk;" but also "take trial and cognition of the difference between the said old measures and weights, and the measures and weights now established, &c. and to ascertain the proportion, and insert the same in their registers and court-books, to remain with them for the decision of such controversies as may arise in their bounds anent the disconformity aforesaid, and to draw up a report of their diligence therein, and conclusion, in writing, subscribed by the sheriffs, magistrates, and justices of peace, &c. and present the same to the Lords of Session before the 1st day of July then next, to the effect the same may be delivered to the clerk-register to be insert in the books of council, *ad futuram rei memoriam*. And that none of the said five shires, nor no others his Majesty's lieges within this kingdom, presume, in time to come, to buy, sell, block, bargain, contract, or set in tack, to or with others, for receipt or delivery, with any other weight, met, or measure, than those by this act approved and established; and the Lords of Council and Session were required to direct letters of publication of the premisses to be proclaimed at the market-crosses of the head boroughs of this realm, and other places needful, that none might pretend ignorance; commanding and charging all provosts and bailies of boroughs and cities, both of royalty and regality, and also the bailies of boroughs of barony, and justices of peace, and others whatsoever, in places where markets are holden, to put this present act in execution; with certification to them, in case they fail, that they

“ shall be called and accused, and that the pains contained in the act of parliament shall be executed upon them in all rigour, in example of others.”

This act and report was ratified, approved of, and confirmed, by a special act in 1621, James VI. parl. 23. cap. 17. which act commands and charges all “ his Majesty’s lieges and subjects to embrace, obey, and observe the aforesaid act and statute, in the whole heads and conditions of the same, under all the highest pain, charges, and offence which they may incur through their disobedience, and as they will be answerable.”

Another act immediately follows this act, “ discharging the giving of a peck to the boll, or superadding any quantity beyond the true quantity bought and sold at the price agreed upon, under the penalty of forty shillings for every boll of victual received contrary to the tenor of the act.”

In 1663, Charles II. parl. 1. sess. 3. cap. 17. an act was made, declaring the measure of coal to be by the Culrofs chalders.

And by the 18th act of the same parliament, a standard of the foot-measure was appointed to be made, and preserved by the city of Edinburgh.

By an act in 1681, Charles II. parl. 3. bread and butcher-meat are ordained to be sold by weight.

By an act in 1685, James VII. parl. 1. cap. 44. intitled, *Act for a standard of miles*, the mile is established to be of 1760 yards, as in England. It does not appear that there was any statutory mile in Scotland before that time.

By an act in 1686, James VII. parl. 1. cap. 30. the measure of bark is established.

By an act in 1696, William and Mary, parl. 1. sess. 6. c. 6. it is ordained, “ That all sorts of meal bought and sold within this kingdom, shall be sold and delivered by weight, at eight stone Troy weight, in place of the boll of Linlithgow measure, and so proportionally, under the pain of confiscation of all meal sold otherwise than as hereby appointed, and imprisonment of the seller thereof for a week, *toties quoties*; declaring
“ hereby,

“ hereby, that the meal so confiscate shall immediately be-
“ long to the first informer ; and requiring all sheriffs,
“ stewarts, bailies of regalities, royalties, or baronies,
“ all magistrates of royal burghs, justices of peace, and
“ all other judges whatsoever, to cause this act to be put
“ to due execution ; certifying all such judges and magi-
“ strates, who, after due information, shall neglect to exe-
“ cute the same, by delivering the said meal to the first
“ informer, and imprisoning the seller, in manner fore-
“ said, that they shall be liable to the informer in the
“ double of the value of all meal sold within their bounds,
“ otherwise than is appointed by this act ; reserving their
“ relief from the particular transgressors, in so far as ex-
“ tends to the single value thereof.”

Thus stood the law before the Union in 1707. It had good effects, in so far as it clearly established what were the standard weights and measures : but as care was not taken to ascertain and publish the proportions which the customary weights and measures bore to the standards, the former were not laid aside ; and it could not be otherwise. Even the use of the Trone weight, though expressly discharged by the act of 1618, was continued as before.

The diversity of the whole at this day, not only in the different counties, but in different parts of the same county, is well known, and appears in a striking light in the annexed tables.

By the 17th article of the Union, in 1707, it was enacted, “ That the same weights and measures shall be used
“ throughout the united kingdom as are now establish-
“ ed in England ; and that standards of weights and
“ measures shall be kept by those boroughs in Scotland to
“ whom the keeping the standards of weights and mea-
“ sures does of special right belong : All which standards
“ shall be sent down to such boroughs from the stand-
“ ards kept in the exchequer at Westminster,” &c.

They were sent down accordingly ; and they added to the number of our different weights and measures, but did not supersede any of them ; probably for the reason above given, that no pains was taken to make the people in general acquainted

acquainted with their proportion to the Scotch weights and measures.

It is even a remarkable circumstance, that in passing several acts of parliament since the Union, so far from having it in view to carry the 17th article, concerning weights and measures, into execution, it would seem to have been entirely overlooked and forgotten.

By statute 24th George II. c. 31. § 4. it is enacted, That all lintseed and hempsseed shall be sold by the Linlithgow barley-measure, streaked; and there is a penalty of forty shillings annexed to the selling by any other measure: and this is the more improper, that the duties upon importation are all paid by English weights and measures.

There is another mark of inattention in the 8th clause of this act. It introduces an anomalous stone-weight, neither Scotch nor English, for the weighing of hemp and flax: for it enacts, "That all persons who shall dispose of any hemp or flax, by any other weight than the stone consisting of sixteen pound weight Avoirdupois, shall forfeit, for every offence, a sum not exceeding L. 5." There is no such stone known, either in the law of Scotland or England; for the Scotch Troye stone is 17 lb. 6 oz. 7.175 dr. Avoirdupois, and the English stone is 14 lb. Avoirdupois.

There is still another instance, in the late act 13th George III. cap. 43. § 16. and 17. where it is directed, "That oat-meal imported into Scotland, where the price (ascertained as in the act) does not exceed 16 s. per boll, weighing eight stone Troy, shall be forfeited." Here the act does not explain whether Scotch or English Troys, which are different."

BUT, leaving these things, it now remains to be suggested, in what manner the acts of parliament above recited may be put in execution, by which the evils complained of may in a great measure be abated, and perhaps the way paved for obtaining a new and more compleat law for this part of the kingdom, and for carrying the 17th article of the Union into execution.

For

For this end the following suggestions are humbly offered to the sheriffs, the justices of peace, and the magistrates of royal boroughs, whose powers in this essential part of police are set forth in the clauses of the public statutes above recited. — They are these :

1mo, That the sheriffs and the justices of peace of the several counties of Scotland, should meet with the magistrates of the respective boroughs, and, following out the plan in the act 1618, should first of all possess themselves of compleat and accurate sets of the legal standards, both English and Scotch, and should deposit them with the deans of guild, or other magistrates, of every principal city and borough, and settle a method for giving out authentic duplicates in terms of law.

2do, That they should appoint in every city and borough, particular tradesmen for the purpose of making and assizing just copies of the standards ; and particularly for making, assizing, and adjusting Linlithgow firlots and Winchester bushels of one form, and of the capacity directed by law, and should fix rates as low as possible for these articles, especially for the article of adjusting old firlots brought to them for that purpose.

3tio, That they should establish some proper method of getting an account of the customary weights and measures in each county and borough, taking mediums where the differences are but small ; and that they should ascertain the proportion betwixt these weights and measures and the legal standards, and make tables for converting them readily into the standards, and put these proportions and tables upon public record.

4to, That they should give public notice in markets, and at parish-churches, and otherwise, to all heritors, farmers, and others, to lay aside all weights and measures of different denominations from those allowed by law, and by a limited time to bring to a certain place their whole firlots, bushels, and other measures and weights of legal denomination, which are not agreeable to the standards, and marked as such, to be adjusted and marked ; and that after a limited time, all persons who shall use, in buying, selling, or delivering, weights and measures of

of denominations different from the standards, or disconform thereto, or who shall use false weights and measures in any manner, shall be prosecuted and punished according to law.

5to, That, in respect the execution of the law has not been uniform, they should make and publish particular regulations, setting forth the several other malpractices which they deem to fall under the law, and in what manner and to what extent they are to apply the law in punishing them.

6to, That they appoint an officer for carrying on prosecutions, and advertise a reward for informers, to be paid on conviction.

THE difficulties which may be objected to the efficacy of such regulations are these.

1st, That in certain cases of refusing to lay aside customary weights and measures, and to conform to those authorised by law, the interposition of the privy council of Scotland seems necessary, which council does not now exist.

2dly, Are the acts of 1491, appointing the users of false weights and measures to be tried before the justiciary as guilty of falsehood; and of 1607, empowering sheriffs and magistrates to forfeit the moveables of such offenders, in force? or how can such offenders be punished?

With regard to the first difficulty, it seems to respect singly the case where the magistrates of a borough are sturdy in refusing, within their limits, to abolish customary standards, and to receive the legal ones. This is a case that cannot well be supposed to exist. In all other cases, the justices and magistrates are directed to take order, that is, to put the law in execution themselves, and, *if need be only*, to lay the matter before the council. Since the passing of these acts also, the justices of peace have been created, and have received more full powers for regulating matters of police; and there cannot be a doubt of the powers of the justices of peace, and magistrates, within their several jurisdictions, to cancel all weights and measures disconform to legal standards, and to make and execute regulations against offenders; and the justices

justices of peace have been in use of doing so in many counties, though hitherto not with compleat attention and effect.

With regard to punishment, there is no ground to say, that by reason of desuetude offenders cannot be tried and punished upon the aforesaid acts of parliament. Although the utmost severity of these acts may have been in disuse; yet justices of peace, and magistrates, have been constantly in use to fine and punish offenders against these laws: and there cannot be a doubt, that if they make reasonable, clear, and, pointed regulations, for explicating the jurisdiction which the law has given them, and even enjoined them to exercise, they will be supported by the supreme courts.

What has been proposed, presumes that we are to keep the use both of our Scotch and English standards, as ascertained by law; and it would be a great matter could the various weights and measures in use be brought to an uniformity with these. But it is highly probable, that, in following out the method proposed, matters would of course go much farther, and even to the laying aside the use of the Scotch standard weights and measures altogether. As for instance, when it is generally known, that an English yard is 36 inches, and a Scotch ell $37\frac{2}{10}$, it must appear of no use to keep any measure but the first. For if one have occasion to reckon by the latter, it is but adding an inch and one fifth to each yard.

In the same manner, in liquid measure, if it is known that 8 English wine-quarts make about $9\frac{1}{16}$ Scotch chop-pins, there is no need for keeping both these measures.

The same thing applies with additional force to the corn-measures. By taking entirely to the Winchester bushel, which serves the English for all sorts of corn, we get rid of the two other measures used in Scotland; namely, the wheat and barley firlots: for if to four Winchester bushels there be added three English corn-quarts, they make but about fourteen solid inches more than the wheat-boll.

Again, for the oat-measure, if from six Winchester
C bushels

busshels there be taken an English corn-quart, an oat-boll is left with an excess of only 13 solid inches.

The same thing may be applied to county-measures. Thus, in Berwickshire, if to six Winchester bushels an English corn-peck is added, the excess on the medium Berwickshire boll is only about $2\frac{4}{10}$ solid inches.

This is only for hand-use, and for those who do not understand figures, or will not take the trouble to look at the tables, where the proportions are exactly stated. In either way there is certainly a saving of trouble, confusion, and expence, by making one set of corn-measures serve for five sets.

With regard to weight : The Trone weight, which is used for commodities of home production, was abolished by act of parliament in 1618, and certainly ought to be laid aside. There is no standard for it except the custom of Edinburgh. It is different almost in every shire; and often greatly so in the different towns of the same shire. (See Forfarshire). It is now generally commensurated by Avoirdupois weight, and the name only remains. How absurd is it then to retain the use of it in any manner? The same reasoning holds in degree with Scotch Troye, or Amsterdam weight. The Avoirdupois, by which we deal in all kind of groceries, and in every thing with the southern part of the kingdom, should be substituted in place of both the Trone and Dutch weights.

The Scotch are obliged to understand and use the whole English weights and measures, according to which the public taxes are paid and bounties allowed. Nothing could be more advantageous in common dealing, as well as in commerce at large, than to have but one standard for both parts of the kingdom.

As a proof that this plan, though not to be executed at once, is not however impracticable; the shire of Ayr has actually laid aside their Scotch measures for corn, and taken entirely to the Winchester bushel, (See the table of that shire); by which means they can, without any troublesome calculation, compare the prices, the weight, and the produce, in flour or meal, of the different sorts of corn and grain.

But

But if people will be tenacious of reckoning in the old way, still it is obvious they ought to keep only one sort of measure, and one sort of weight, let them reckon as they please. Bring them once that length, cut them off from keeping any sort but one, they will soon take to reckon by that only.

Much is in the power of the convention of royal boroughs. In that body are the great merchants. They, best of all, will see the benefit of a plan of this sort, and are best able to promote it, and to stifle the opposition, if any are so narrow-minded as to make opposition, to a general good, for fear of losing the advantages their skill gives them over others less knowing.

One thing is particularly incumbent on the magistrates of royal boroughs, and it is exceedingly material, whatever kind of weight and measure be adopted; it is, that the duplicates given out under a public stamp be exactly conformable to the legal standards. It is to be feared, that in too many places the keeping of the standards, and the giving out of duplicates, is entrusted to the care of people very unfit for and unworthy of that trust. Magistrates are doubtless aware of the bad effects of an authorised erroneous measure, which is equally mischievous when too large as when too little. For by this means an unjust dealer may have two measures of equal authority, and may use the one for receiving, and the other for delivering. This is a grievous wrong, and is liable to the notice of law.

Much is also in the power of the sheriffs, great part of whom have the opportunity of meeting in Edinburgh, of conferring together concerning matters of police, and of extending uniformity of procedure through the different counties. They are the proper conveners of the several counties; and may lay their plans before the justices of peace, with whom the law has entrusted the regulation of all matters of police, and particularly the execution of this great branch of it.

If judges and magistrates would heartily set about the execution of the laws we have, it is not to be conceived in that few particulars we should require new laws. What

these particulars are, would be best known by the attempt, which would certainly be attended with beneficial effects in the mean time, and would pave the way for a law of entire uniformity with the English standards.

To promote this good work, and to make the execution of the laws more uniform and easy, the annexed tables have been prepared. The materials from which they are made have been collected occasionally by a gentleman who was called upon by the chairman of the late committee of the House of Commons, to give his assistance in forming some clauses which were to have been added to the bills above mentioned, had they been resumed, in order to adapt them to this part of the united kingdom. These materials are chiefly reports from the magistrates of the royal boroughs of Scotland, or from the sheriffs of the several counties, or from other learned and judicious persons. They are, however, far from being complete; and though considerable pains have been taken, it is probable, from the nature and difficulty of the thing, that there may be several mistakes. It is well known that in many counties there is no fixed standard practised particularly in corn-measures: no two firlots are exactly the same; yet every man will say that his measure is the right one, and that every other person's measure is too large or too little. In such counties also the accounts given by farmers are different from the accounts given by persons employed to buy corn upon commission for exportation, a thing easily understood. In such cases the medium was the only thing that could be taken, though probably it will be censured by both these classes of people.

There is, besides, a source of error which could easily be avoided; and that is the diversity of the pint measure, as to which the reports were not always precise. Where no difference was expressed, it must be supposed that the standard-pint was meant.

With regard to the tables, they are divided into two sets. The first contains the standards of England and Scotland, with their proportions to each other, and tables
converted

conversion for applying these proportions, with some other general tables which may be of use.

The second set contains the customary weights and measures of the several counties and boroughs in Scotland.

Considerable pains have been taken to make the calculations exact. This was the work of an able and ingenious accountant, who gave his assistance to that part.

To conclude: As the discovery of truth, and the promoting of public good, is the object of this investigation, it is hoped that every person will be ready to second that intention, by communicating to the printer what mistakes or omissions he may observe, to the end they may be amended and supplied in an additional sheet. But in setting about a work of this kind, particularly with respect to the corn-measures, it is recommended, not to trust to common report, or even to stamped measures, but to try such measures by the weight of water which they contain: a process nowise difficult, and which will be more easily accomplished by looking into the Table annexed containing the weight of various measures of water.

By these means exact tables of the customary weights and measures may gradually be obtained; and should the times prove unable to make the exertion requisite for a general reformation, yet, in the mean time, information will be attended with both public and private advantage.

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GENERAL TABLES.

TABLE I.

With Measures of LENGTH, raised from the standard yard.

Palm.

2.64	Gunter Link.				
3	1.136	Span.			
4	1.515	$1\frac{1}{3}$	Foot.		
6	2.272	2	$1\frac{1}{2}$	Cubit.	
12	4.545	4	3	2	Yard.
20	7.575	$6\frac{2}{3}$	5	$3\frac{1}{3}$	$1\frac{2}{3}$ Pace.
24	9.091	8	6	4	$2\frac{1}{2}$ Fathom.
66	25	22	$16\frac{1}{2}$	11	$5\frac{1}{2}$ $3\frac{3}{10}$ $2\frac{3}{4}$ Pole or Rod.
264	100	88	66	44	22 $13\frac{1}{3}$ 11 4 GunterChain
2640	1000	880	660	440	220 132 110 40 10 Furlong.
21120	8000	7040	5280	3520	1760 1056 880 320 80 8 Mile.

English ell contains one yard and a quarter, or forty-five

Scotch

TABLE II.

Scotch Measures of LENGTH, raised from the standard ell.

English Inch.						
8.928	Gunter Link.					
12	1.344	English Foot.				
37.2	4.166	3.1	Ell.		English Yards.	
223.2	25	18.6	6	Fall or Rood.		= 6.2
892.8	100	74.4	24	4	Gunter Chain. = 24.8	
8928	1000	744	240	40	10	Furlong.
71424	8000	5952	1920	320	80	8 Mile. = 1984

In this table, English inches and feet are set down instead of Scotch; because Scotch inches and feet are little used. The Scotch are as follows :

Scotch Inch.		=	English Inches.	
12	Scotch Foot.	=	-	1.0054054
37	3 $\frac{1}{2}$	Ell.		12.064864
		28	= a Bolt.	

The Glasiers foot is commonly reckoned 8 inches ; but the above is the standard Scotch foot for Wrights, Glasiers, &c. by act 18. in 1663.

The above is the computed Scotch mile, although by act 44 James VII. in 1685, the Scotch mile is ordained like the English, to contain 1760 yards of 36 inches each.

TABLE III.

A Table for converting SCOTCH ELLS into ENGLISH YARDS, and ENGLISH YARDS into SCOTCH ELLS.

Scotch Ells.	English Yards.		English Yards.	Scotch Ells.
$\frac{1}{8}$	.1291666		$\frac{1}{8}$	.1209677
$\frac{1}{4}$	.2583333		$\frac{1}{4}$	.2419354
$\frac{1}{2}$	.5166666		$\frac{1}{2}$	.4838709
1	1.0333333		1	.9677419
2	2.0666666		2	1.9354838
3	3.1		3	2.9032258
4	4.1333333		4	3.8709677
5	5.1666666		5	4.8387096
6	6.2		6	5.8064516
7	7.2333333		7	6.7741935
8	8.2666666		8	7.7419354
9	9.3		9	8.7096774
10	10.3333333		10	9.6774193

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TABLE

TABLE IV.

English SQUARE Measure,

Inch.	Gunter Link.							
62.726								
144	2.295	Foot.						
1296	20.661	9	Yard.					
3600	57.392	25	$2\frac{7}{9}$	Pace.				
39204	625	$272\frac{1}{4}$	$30\frac{1}{4}$	10.89	Pole or Perch.			
627264	10000	4356	484	174.24	16	Gunter's Chain,		
1568160	25000	10890	1210	435.6	40	2.5	Rood.	
6272640	100000	43560	4840	1742.4	160	10	4	Acre.

TABLE V.

Scotch SQUARE Measure,

English Inch.

79.709	Gunter Link.							
144	1.806	English Foot.						
1383.8	17.361	9.61	Ell.					
49818.2	625	345.96	36	Fall.				
797091.8	10000	5535.36	576	16	Gunter's Chain.			
1992729.6	25000	13838.4	1440	40	2.5	Rood.		
7970918.4	100000	55353.6	5760	160	10	4	Acre.	

The rood of Mason or Slater work is 36 Square ells.

TABLE

TABLE VI.

A Table for converting SCOTCH ACRES into ENGLISH, and ENGLISH ACRES into SCOTCH.

Scotch.		Englilh Acres.
Fall	1	.0079421
Rood	1	.3176859
Acre	1	1.2707438
	2	2.5414876
	3	3.8122314
	4	5.0829752
	5	6.353719
	6	7.6244628
	7	8.8952066
	8	10.1659504
	9	11.4366942
	10	12.707438

Englilh.		Scotch Acres.
Pole	1	.0049184
Rood	1	.1967352
Acre	1	.7869407
	2	1.5738814
	3	2.3608221
	4	3.1477627
	5	3.9347034
	6	4.7216441
	7	5.5085848
	8	6.2955255
	9	7.0824662
	10	7.8694068

TABLE VII.

English Measures of CAPACITY for LIQUORS.

I. WINE MEASURE; for Wine, Spirits, Oil, Cyder, Perry, and Honey, raised from the standard wine gallon.

Solid Inch.

28.875	Pint.									
57.75	2	Quart.								
231	8	4	Gallon.							
4158	144	72	18	Rundlet.						
7276½	252	126	31½	1¾	Barrel.					
9702	336	168	42	2⅓	1⅓	Tierce.				
14553	504	252	63	3½	2	1½	Hoghead.			
19279	672	336	84	4⅔	2⅔	2	1⅓	Puncheon.		
29106	1008	504	126	7	4	3	2	1½	Butt.	
58212	2016	1008	252	14	8	6	4	3	2	Tun.

2. ALE and BEER Measure, raised from the standard ale gallon

Solid Inch.

35 25	Pint.			
70.5	2	Quart.		
282	8	4	Gallon.	
9588	272	136	34	Barrel.
14382	408	204	51	1½ Hoghead.

The Beer-measure for the city of London is 36 gallons to the barrel, and 54 gallons to the hoghead.

The Ale-measure for London is 32 gallons to the barrel and 48 gallons to the hoghead.

TABLE

TABLE IX.

A Table for converting ENGLISH WINE GALLONS into SCOTCH GALLONS, and SCOTCH GALLONS into ENGLISH WINE GALLONS.

English Gallons.	Scotch Gallons.		Scotch Gallons.	English Gallons.
1	.2792445		1	3.581091
2	.558489		2	7.162182
3	.8377335		3	10.743273
4	1.116978		4	14.324364
5	1.3962225		5	17.905454
6	1.6754671		6	21.486545
7	1.9547115		7	25.067636
8	2.2339561		8	28.648727
9	2.5132005		9	32.229818
10	2.7924451		10	35.810909

TABLE X.

A Table for converting ENGLISH GALLONS of ALE and BEER into SCOTCH GALLONS, and SCOTCH GALLONS into ENGLISH.

English Gallons.	Scotch Gallons.		Scotch Gallons.	English Gallons.
1	.340896		1	2.933447
2	.681792		2	5.866893
3	1.022688		3	8.80034
4	1.363584		4	11.733787
5	1.704479		5	14.667234
6	2.045375		6	17.600681
7	2.386271		7	20.534127
8	2.727167		8	23.467574
9	3.068063		9	26.401021
10	3.408959		10	29.334468

TABLE

TABLE XI.

English Measure of CAPACITY for things DRY.

The CORN and SALT MEASURE, is raised from the Winchester bushel, as established by 13th William III. cap. 5.

Solid Inch.

33.6	Pint.				
67.2	2	Quart.			
268.8	8	4	Gallon, or 2 Quaterns.		
537.6	16	8	2	Peck.	
2150.42	64	32	8	4	Bushel.
17203.36	512	256	64	32	8 Quarter.

The corn-gallon, kept in Guildhall, contains $272\frac{1}{4}$ solid inches; but is no standard. See Report Committee of the House of Commons, 1758.

Dr Arbuthnot, however, has taken it for a standard, and made his tables and calculations agreeable to it; and others have followed him; by which means his corn-bushel is 28 solid inches larger than standard.

The water-measure is, by 1st Ann, stat. 1. cap. 15. appointed to be of the same dimensions with the Winchester corn-bushel, $18\frac{1}{2}$ inches wide, and 8 deep; and apples and pears are appointed to be sold by this bushel heaped.

The coal-measure is, by 12th Ann, stat. 2. cap. 17. appointed to be by a bushel equal to a Winchester bushel, and one quart of water; and 36 of these bushels heaped makes the legal chaldron.

A sack of coals contains 3 bushels.

Coals are also sold by the tun of 20 cwt.

The Newcastle chaldron of coals is 53 cwt.

TABLE

TABLE XII.

Scotch Measures of CAPACITY for things DRY.

1. Wheat, Pease, Beans, Rye, and White Salt, raised from the standard firloft, containing $21\frac{1}{4}$ pints.

Solid Inch.

103.404	Pint.					
137.333	1.3281	Lippie or Forpet.				
549.333	5.3125	4	Peck.			
2197.335	21.25	16	4	Firloft.		
8789.34	85	64	16	4	Boll.	
140629.44	1360	1024	256	64	16	Chalder.

Rye was sometimes reckoned by the last = $18\frac{1}{2}$ bolls.

2. Oats, Barley, and Malt, raised from the standard firloft, containing 31 pints.

Solid Inch.

103.404	Pint.					
200.345	1.9375	Lippie or Forpet.				
801.381	7.75	4	Peck.			
3205.524	31	16	4	Firloft.		
12822.096	124	64	16	4	Boll.	
205153.53	1984	1024	256	64	16	Chalder.

3. COAL Measure.

By act 1663, Charles II. parl. i. sess. 3. cap. 17. the duty on the chalder of coals is directed to be paid according to the Culrofs chalder, of which the standard is now lost.

The Scotch Book of Rates mentions the great chalder of Culrofs, and the small chalder of Culrofs, which were in the proportion of five to two.

4. BARK Measure.

By act 1686, James VII. parl. i. cap. 30. the measure of Bark is settled, viz.

Of UNBEATEN Bark,

22 gallons make a boll.

Small BEATEN Mallowie Bark,

The Linlithgow Barley measure.

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TABLE

TABLE XIII.

Table for converting SCOTCH STANDARD BOLLS of Wheat, Rye, Beans, Pease, and Salt, into WINCHESTER BUSHELS and QUARTERS; and WINCHESTER BUSHELS and QUARTERS into SCOTCH BOLLS.

Scotch into English.			English into Scotch.	
Scotch Stand-ard.	Winchester		Winchester.	Scotch Standard Bolls.
	Busshels.	Quarters		
Lippie 1	.c638635	.0079829	Quartern 1	.0152914
Peck 1	.2554542	.0319318	Peck 1	.0611656
Firlot 1	1.0218167	.1277271	Busshel 1	.2446623
Boll 1	4.0872667	.5109083	Quarter 1	1.9572983
2	8.1745333	1.0218167	2	3.9145965
3	12.2618	1.532725	3	5.8718948
4	16.3490667	2.0436333	4	7.8291931
5	20.4363334	2.5545417	5	9.7864914
6	24.5236	3.06545	6	11.7437896
7	28.6108667	3.5763583	7	13.7010879
8	32.6981334	4.0872667	8	15.6583862
9	36.7854001	4.598175	9	17.6156844
10	40.8726667	5.1090833	10	19.5729827

TABLE XIV.

Table for converting SCOTCH STANDARD BOLLS of Barley and Oats, into WINCHESTER BUSHELs and QUARTERS; and WINCHESTER BUSHELs and QUARTERS into SCOTCH BOLLS.

Scotch into English.			English into Scotch.	
Scotch Standard.	Winchester		Winchester.	Scotch Standard Bolls.
	Busshels.	Quarters		
Lippie 1	.0931656	.0116457	Quartern 1	.010482
Peck 1	.3726625	.0465828	Peck 1	.041928
Firlot 1	1.4906502	.1863313	Busshel 1	.167712
Boll 1	5.9626008	.7453251	Quarter 1	1.3416964
2	11.9252016	1.4906502	2	2.6833928
3	17.8878024	2.2359753	3	4.0250892
4	23.8504032	2.9813004	4	5.3667856
5	29.813004	3.7266255	5	6.708482
6	35.7756048	4.4719506	6	8.0501784
7	41.7382056	5.2172757	7	9.3918748
8	47.7008064	5.9626008	8	10.7335712
9	53.6634071	6.7079259	9	12.0752676
10	59.6260079	7.453251	10	13.416964

TABLE XV.

The CUBICAL FEET in various LIQUID and DRY Measures.

			Cubical Feet.
English Wine-Hoghead,	—	—	8.4219
English Ale-Hoghead,	—	—	8.3229
Winchester Bushel,	—	—	1.2444
Quarter,	—	—	9.9556
Wheat Firlot,	—	—	1.2716
Wheat Boll,	—	—	5.0864
Oat Firlot,	—	—	1.8550
Oat Boll,	—	—	7.4202

WEIGHTS.

TABLE XVI.

ENGLISH Weight.

I. TROY. For Gold, Silver, Jewels, and Liquors.

Grains. gr.			
24	Penny weight. p. wt.		
480	20	Ounce. oz.	
5760	240	12	Pound. lb.

Nota. In Scotland, Gold and Silver are weighed by the above ounce and pound; but the ounce is divided into 16 drops and the drop into 30 grains.

2. APOTHECARIES. For Medicines.

Grains. gr.				
20	Scruple. ℥			
60	3	Dram. ʒ		
480	24	8	Ounce ʒ	
5760	288	96	12	Pound. lb

This weight is the same as Troy ; though differently divided.

3. AVOIRDUPOIS. In England ; for every sort of Merchandise excepting those above mentioned.

Troy Grains.

27.3515625	Dram. dr.				
437.625	16	Ounce. oz.			
7002	256	16	Pound. lb.		
98028	3584	224	14	Stone. st.	
784224	28672	1792	112	8	Hund. wt. cwt.
15684480	573440	35840	2240	160	20 Ton. T.

20 stons = Sack of Flour.

Nota. The pound Avoirdupois is commonly reckoned to contain only 7000 Troy grains ; but by the Report of the Committee of the House of Commons, in 1759, that pound, according to the medium of the several weights accounted standards was found to contain 7002 Troy grains.

At London,

Hay is sold by the load of 18 cwt. nearly = 93 Scotch stons Trone weight.

Straw, by the load of 36 trusses, each truss weighing 36 lb. Avoirdupois, nearly = 59½ Scotch stons Trone weight.

TABLE

TABLE XVII. SCOTCH Weight.

1. TROYE. For Meal, Butcher-meat, Hemp, Iron.
Eng. Troy Grains.

29.75	Drop. dr.			
476	16	Ounce. oz.		
7616	256	16	Pound. lb.	
121856	4096	256	16	Stone. ft.

200 lb. = Barrel of $\left\{ \begin{array}{l} \text{Beef.} \\ \text{Athes.} \\ \text{Bacon.} \\ \text{Butter.} \end{array} \right.$
12 Barrels = Last.
2000 lb. = Fodder of Lead.

Nota. The Act 1617 makes the French Troye weight the standard for Scotland; and declares, That the standard Stirling pint-jug contains 55 French Troye ounces of river water. This pint is found to contain 103.404 cubic inches, and the cubic inch of such water to weigh 253.18 English Troy grains; by consequence the Scotch Troye pound weighs, as above, 7616 English Troy grains. English grains are brought into the above table, because Scotch are out of use. 36 Scotch grains were reckoned to make a drop weight, consequently 576 to make an ounce. See Table of French weight.

2. TRONE. For home-productions, according to the custom of Edinburgh. See Table for Edinburgh.

Eng. Troy Grains.

29.75	Drop. dr.			
476	16	Ounce. oz.		
9520	320	20	Pound. lb.	
152320	5120	320	16	Stone. ft.

Nota. This weight, though abolished by act in 1617, is still in constant use, and is different almost in every country. According

According to the custom of Edinburgh, the present Trone pound contains 20 Scots Troye ounces as above. But it appears by Sir George Mackenzie's observations on the 96th act of the 6th parliament of James IV. that at the time this weight was abolished, the Trone pound contained only 19 oz. 8 drop, Paris weight.

TABLE XVIII.

AMSTERDAM Weight.

Amsterdam weight is commonly reckoned the same with Scotch Troye, and is divided in the same manner; but it seems to be a little heavier: for

A Dutch pound belonging to the city of Glasgow, compared with the English weights sent to Glasgow at the Union is - - - 7628 English Troy grains.

One sixteenth part of a standard Dutch stone from Campvere, in the possession of a gentleman in Edinburgh, compared with the English weights sent to Edinburgh, at the time of the Union, weighs 7633½

Whereas the Scotch Troye weighs only - 7616

In a round way of reckoning, without fractions,

100 lb.	Avoirdupois	are held equal to	92 lb.	Amsterdam.
112	—	—	=	to 103
109	—	—	=	to 100

Therefore, to convert Avoirdupois pounds to Amsterdam, multiply by .92.

Amsterdam pounds to Avoirdupois, multiply by 1.09.

And in common dealings this rule will answer for Scotch Troye.

N. B. Besides the Amsterdam pound, described to be nearly the same as the Scotch, there is another pound used by the Dutch, in retailing, called the *Houfe pound*, which, as near as can be calculated, is five per cent. less than the other, and weighs about 16 oz. 9 drams Avoirdupois.

TABLE

TABLE XIX.

PARIS Weight.

Grain.					Eng. Troy Gr.	
					nearly =	$\frac{5}{6}$
24	Denier or Scruple.					
72	3	Grosse or Dragme.				
576	24	8	Once.		=	472.5
4608	192	64	8	Marc.		
9216	384	128	16	2	Livres or pound. = 7560	

According to Dr Arbuthnot, and to the transactions of the Royal Society in 1742 and 1743, (p. 541.), the Paris pound is exactly 7560 English Troy grains. They reckoned the Avoirdupois pound 7000 Troy grains; and upon that supposition the 100 lib. Paris is exactly equal to 108 lib. Avoirdupois. On the other hand, 100 lib. Avoirdupois is equal to 92.5925 lib. Paris weight.

Therefore to convert

Avoirdupois lib. to Paris, multiply by .925925

Paris lib. to Avoirdupois, multiply by 1.08

N. B. It appears by the Scotch act in 1617, That the Scotch Troy weight was intended to be the same as the French Troy; probably so was the Dutch weight, though both do now appear to be heavier than the Paris weight. If the French Troy weight was different from the Paris weight, that circumstance might account for the difficulty: But there is reason to think that the Paris weight and the French Troy are, and always were, the same, and that the Scotch standard was intended to be agreeable to that weight; for in a Treatise on the Weights and measures of Scotland, by Alexander Hunter burghers of Edinburgh, printed in 1624, the Scotch ounce is divided (as the Paris ounce) into 576 grains, and stated as equal to 471.250 English Troy grains, which to a trifle corresponds with the proportion in the preceding table. Sir George Mackenzie, in his observations upon the 96th act of the 6th parliament of James IV. gives an account of the Scotch weights and measures which

GENERAL TABLES.

41

which is a verbatim copy of Mr Hunter's Treatise. Both of them use the words *Paris weight* in place of *French Troy*, which shows their understanding that these weights were the same. This goes far to prove, that the Scotch standards in 1617 have been inaccurately made, in so far as they exceed the Paris weight; and, by consequence, that the standard pint of Stirling is proportionably larger than it was intended to be.

TABLE XX.

Comparative Table of WEIGHTS.

English Troy.	Avoirdupois.		Scotch Troye.		Trone Pounds.
	Oz.	Drams.	Oz.	Drops.	
1 Grain,	—	.036	—	.034	.000105
1 Scruple,	—	.731	—	.672	.002101
1 Penny weight,	—	.877	—	.807	.002521
1 Dram,	—	2.194	—	2.017	.006302
1 Ounce,	1	1.549	1	0.134	.05042
1 Pound,	13	2.591	12	1.613	.605042

To convert English Troy Pounds

into Pounds { Avoirdupois, multiply by .822622
 Scotch Troye, by .756302
 Trone, by .605042

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Comparative Table of Weights, Continued.

Avoirdupois.	English Troy. lb. oz. pwt. gr.	Scotch Troye. ft. lb. oz. dr.	Trone. ft. lb.
1 Dram,	— — 1 3.35	— — — .919	— .002873
1 Ounce,	— — 18 5.62	— — — 14.71	— .045969
1 Pound,	1 2 11 18	— 14 11.361	— .735504
1 Stone,	17 — 4 12	— 12 13 15.058	— 10.297058
1 Hund. Wt.	136 1 16 —	6 6 15 8.47	5 2.37647

To convert Avoirdupois Pounds

into Pounds { English Troy, multiply by 1.215625
 Scotch Troye, by .91938
 Trone, by .735504

Scotch Troye.	English Troy. lb. oz. pwt. gr.	Avoirdupois. ft. lb. oz. dr.	Trone Pounds.
1 Drop,	— — 1 5.75	— — — 1.088	.003125
1 Ounce,	— — 19 20	— — 1 1.403	.05
1 Pound,	1 3 17 8	— 1 1 6.448	.8
1 Stone,	21 1 17 8	1 3 6 7.175	12.8

To convert Scotch Troye Pounds

into Pounds { English Troy, multiply by 1.322222
 Avoirdupois, by 1.087689
 Trone, by .8

Trone.	English Troy. lb. oz. pwt. gr.	Avoirdupois. ft. lb. oz. dr.	Scotch Troye. ft. lb. oz.
1 Ounce,	— — 19 20	— — 1 1.403	— — 1
1 Pound,	1 7 16 16	— 1 5 12.061	— 1 4
1 Stone,	26 5 6 16	1 7 12 0.968	1 4 —

To convert Trone Pounds

into Pounds { English Troy, multiply by 1.652777
 Avoirdupois, by 1.359611
 Scotch Troye, by 1.25

TABLE

TABLE XXI.

Table for converting AVOIRDUPOIS Pounds into ENGLISH TROY Pounds, and ENGLISH TROY Pounds into AVOIRDUPOIS Pounds.

Avoir- dupois.	English Troy.	English Troy.	Avoirdupois Pounds.
Ounce 1	.075976	Ounce 1	.068552
2	.151953	2	.137104
3	.227929	3	.205655
4	.303906	4	.274207
5	.379882	5	.342759
6	.455859	6	.411311
7	.531835	7	.479863
8	.607812	8	.548415
Pound 1	1.215625	Pound 1	.822622
2	2.43125	2	1.645244
3	3.646875	3	2.467866
4	4.8625	4	3.290488
5	6.078125	5	4.11311
6	7.29375	6	4.935733
7	8.509375	7	5.758355
8	9.725	8	6.580977
9	10.940625	9	7.403599

TABLE XXII.

Table for converting SCOTCH TROYE Pounds
into ENGLISH TROY Pounds, and ENGLISH
TROY into SCOTCH TROYE Pounds.

Scotch Troye.	English Troy Pounds.		English Troy.	Scotch Troye Pounds.
Ounce 1	.082638		Ounce 1	.063025
2	.165277		2	.12605
3	.247916		3	.189075
4	.330555		4	.252101
5	.413194		5	.315126
6	.495833		6	.378151
7	.578472		7	.441176
8	.661111		8	.504202
Pound 1	1.322222		Pound 1	.756302
2	2.644444		2	1.512605
3	3.966666		3	2.268907
4	5.288888		4	3.02521
5	6.611111		5	3.781512
6	7.933333		6	4.537815
7	9.255555		7	5.294117
8	10.577777		8	6.05042
9	11.9		9	6.806722

TABL

TABLE XXIII.

A Table for converting STANDARD SCOTCH TROYE Pounds into AVOIRDUPOIS Pounds, and AVOIRDUPOIS Pounds into SCOTCH Pounds.

Standard Scotch	Avoirdupois Pounds.	Avoir- dupois.	Standard Scotch Pounds.
Ounce 1	.06798	Ounce 1	.057461
2	.135961	2	.114922
3	.203941	3	.172383
4	.271922	4	.229845
5	.339902	5	.287306
6	.407883	6	.344767
7	.475863	7	.402228
8	.543844	8	.459689
Pound 1	1.087689	Pound 1	.91938
2	2.175378	2	1.83876
3	3.263067	3	2.75814
4	4.350756	4	3.677521
5	5.438446	5	4.596901
6	6.526135	6	5.516281
7	7.613824	7	6.435661
8	8.701513	8	7.355042
9	9.789202	9	8.274422
10	10.876892	10	9.193802

TABLE

TABLE XXIV.

A Table for converting OLD SCOTCH TRONE Pounds into AVOIRDUPOIS Pounds, and AVOIRDUPOIS into TRONE Pounds.

Trone.	Avoir- dupois Pounds.		Avoir- dupois.	Trone Pounds.
Ounce 1	.084975		Ounce 1	.045969
2	.169951		2	.091938
3	.254927		3	.137907
4	.339903		4	.183876
5	.424878		5	.229845
6	.509854		6	.275814
7	.59483		7	.321783
8	.679806		8	.367752
Pound 1	1.359611		Pound 1	.735504
2	2.719223		2	1.471008
3	4.078834		3	2.206513
4	5.438446		4	2.942017
5	6.798057		5	3.677521
6	8.157669		6	4.413025
7	9.517281		7	5.148529
8	10.876892		8	5.884034
9	12.236503		9	6.619538
10	13.596115		10	7.355042

TABLE

TABLE XXV.

A Table for converting OLD SCOTCH TRONE Pounds into STANDARD SCOTCH TROYE Pounds, and STANDARD SCOTCH Pounds into TRONE Pounds.

Trone Pounds.	Standard Scotch		Standard Scotch	Trone Pounds.
1	1.25		1	.8
2	2.5		2	1.6
3	3.75		3	2.4
4	5		4	3.2
5	6.25		5	4
6	7.5		6	4.8
7	8.75		7	5.6
8	10		8	6.4
9	11.25		9	7.2
10	12.5		10	8

TABLE

TABLE XXVI.

WEIGHT of various measures of CLEAR RIVER WATER, in a temperate state.

Cubic Inches.		Avoirdupois Weight.					
		Ounces.	C.	ft.	lb.	oz.	dr. Tr.
.003949	-	—	—	—	—	—	1
.108032	-	—	—	—	—	—	1
1.728513	-	—	—	—	—	1	—
27.656213	-	—	—	—	1	—	—
387.186981	-	—	—	1	—	—	—
3097.495852	-	—	—	1	—	—	—
1 Cubic Inch,	-	.578532	—	—	—	—	9 7
1 Cubic Foot,	-	999.703033	—	4	6	7 11	6
1 Cubic Yard,	-	26991.981902	15	—	6 15	15	19
1 Scotch Pint,	-	59.822507	—	—	3 11	13	4
1 Wheat Firlot,	-	1271.228278	—	5	9	7 3	17
1 Barley Firlot,	-	1854.497723	1	—	3 14	7	26
1 English Wine Gallon,	-	133.640857	—	—	8 5	10	6
1 English Beer Gallon,	-	163.145981	—	—	10 3	2	9
1 Corn Gallon,	-	155.510807	—	—	9 11	8	4
1 Winchester Bushel,	-	1244.086456	—	5	7 12	1	10

Nota. The preceding comparison of measures, and weight of water, is founded upon an experiment, by which one cubic inch of river-water, in a temperate state, was found to weigh 253.18 Troy grains, and supposes the Avoirdupois ounce to contain 437 Troy grains.

Though English Troy is generally used to weigh liquors, it is thought proper rather to state the above comparison in Avoirdupois, the weight in use for merchandises in general: As by the above table, the capacity of any measure may be ascertained; so, for the more ready application thereof, the weight of water is stated in two columns: in one, in ounces and decimals of an ounce; in the other, in the usual denominations of Avoirdupois weight.

Nota. As the capacity of the Scotch standard pint is ascertained by its containing 55 Scotch Troye ounces of water, and has been found, by experiment, to contain 103.404 cubical inches,

It follows, that a Scotch Troye ounce is 1.88 Cub. In. of water.
And the Scotch Troye pound, 30.08

TABLE XXVII.

Table of the WEIGHT of WHEAT.

	Avoir- dupois Pound.		Scotch Troye. ft. lb. oz.		
A Bushel weighing	63	Corresponds to a standard boll weighing	14	12	11 ³ / ₄
	62		14	8	15 ¹ / ₂
	61		14	5	3 ¹ / ₂
	60		14	1	7 ¹ / ₂
	59		13	13	11 ¹ / ₄
	58		13	9	15 ¹ / ₄
	57		13	6	3
	56		13	2	7
	55		12	14	11
	54		12	10	14 ¹ / ₂
	53		12	7	2 ¹ / ₂
	52		12	3	6 ¹ / ₂
	51		11	15	10 ¹ / ₄

TABLE XXVIII.

Table of the FLOUR (being all of one fort) produced from Wheat, of the medium weight of 57 lb. Avoirdupois per bushel; and also of the BREAD (of one fort) produced from such FLOUR.

	Wheat.	Flour.	Bran.	Dust loft.	Bread.	Quatern loaves, 4 lb. 5½ oz. each.	Allowance to the Bakers.	
	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.		s.	d.
English Quarter of Wheat,	45 6	33 6	10 8	12	4 17	96	12	—
Winchester Bushel of Wheat,	57	42	13 8	1 8	5 2	12	1	6
Standard Boll of Wheat,	232. 15	171 10	55 2	6 3	2 13	49	6	1½
Standard Firlof of Wheat,	58 3¾	42 14½	13 12½	1 8¾	5 3	12½	1	6¼
Berwickshire Boll of Wheat,	356 5	262 8¾	84 6¼	9 6	32 5. 13	75	9	4½
English Stone or Peck of Flour,	19	14	—	—	17 6	4	—	6
Scotch Troye Stone of Flour,	23 9¾	17 6½	—	—	21 9½	5	—	7½
Stone of 16 lb. Avoir- dupois of Flour,	21 11½	16	—	—	19 13¾	4½	—	6¾

Nota.

Nota. The preceding proportion of Flour produced, is according to the common computation, upon which the statutory affize of Bread is founded; but in a noted publication, (the letter in 1773, on occasion of the public enquiry concerning the most fit and proper bread), it is set forth, as admitted by millers and mealmen, that a bushel of wheat, of medium weight, generally produces $\frac{3}{4}$ of its weight in Flour, that is 42 lb. 12 oz. reckoning the 12 ounces only a kind of fine pollard, which the author in his computations considers as Flour. He also says, that he has seen Wheat of 59 lb. to the bushel, (which he supposes 2 lb. better than the medium weight), produce 44 $\frac{3}{4}$ lb. of Flour, and that the dust and breakage thereof was not above $\frac{1}{2}$ lb. in the bushel of Wheat.

TABLE XXIX.

Table of the WEIGHT of BARLEY.

	Avoir- dupois Pound.			Scotch Troye. ft. lb. oz.		
A Bushel weighing	58	Corresponds to a standard boll weighing	{	19	13	15
	57			19	8	7 $\frac{1}{2}$
	56			19	2	15 $\frac{3}{4}$
	55			18	13	8
	54			18	8	— $\frac{1}{4}$
	53			18	2	8 $\frac{1}{2}$
	52			17	13	1
	51			17	7	9 $\frac{1}{4}$
	50			17	2	1 $\frac{1}{2}$
	49			16	12	9 $\frac{3}{4}$
	48			16	7	2
	47			16	1	10 $\frac{1}{4}$
	46			15	12	2 $\frac{1}{2}$
	45			15	6	11
	44			15	1	3 $\frac{1}{4}$
	43			14	11	11 $\frac{1}{2}$
	42			14	6	3 $\frac{3}{4}$

TABLE XXX.

Table of the WEIGHT of OATS, and also of the WEIGHT of MEAL produced from OATS of different qualities.

Winchester bushel of Oats, weighing, Avoirdupois lb.	Weight of Meal produced. Avoirdupois lb. oz.		Standard boll of Oats, weighing, Scotch Troye. ft. lb. oz.			Weight of Meal produced. Scotch Troye. ft. lb. oz.		
42	25	2	14	6	4	8	10	14
41	24	4	14	—	12	8	5	14
40	23	6	13	11	4	8	—	14
39	22	9	13	5	12	7	12	5
38	21	12	13	—	5	7	7	12
37	20	15	12	10	13	7	3	3
36	20	3	12	5	5	6	15	—
35	19	7	11	15	14	6	10	13
34	18	11	11	10	6	6	6	10
33	18	—	11	4	14	6	2	12
32	17	5	10	15	6	5	14	14
31	16	11	10	9	15	5	11	6
30	16	1	10	4	7	5	7	14

Nota. The above table is founded upon twenty years experience of a gentleman in Aberdeenshire. — His account goes down to a Winchester bushel of 16 lb. Avoirdupois, producing 6 lb. 15 oz. Avoirdupois of meal; but is brought no lower here than the bushel of 30 lb. weight, as it is supposed oats of a worse quality are seldom brought to market.

The oats are supposed to be weighed in the month of March, when perfectly dry; if they are weighed before Candlemas, $\frac{1}{8}$, if after Candlemas, and before the middle of March, $\frac{1}{32}$ may be deducted from their weight, and the quantity of meal corresponding to the remainder, should be the produce.

COUNTY.

COUNTY-TABLES.

ABERDEENSHIRE.

LINEAL Measure.

The English Yard and Scotch Ell as in the General Tables.

The Plaiding Yard, of $38\frac{5}{12}$ inches; for Plaiding and other coarse home stuffs.

LIQUID Measure.

The standard Stirling-jug, and other measures, as in the General Tables.

A tin Pint-stoup is likewise used, by the town of Aberdeen, for liquors. It contains 3 lb. 15 oz. Avoirdupois of water, or about 108.89 cubic inches.

DRY Measure :

For Wheat, Rye, Pease, Beans, Meal, Seeds; raised from the firloft, containing 2688.504 cubic inches.

Standard Pint.

$1\frac{3}{8} =$ Lippie.

$6\frac{1}{2} = 4 =$ Peck.

26 = 16 = 4 = Firloft.

104 = 64 = 16 = 4 = Boll.

The above firloft is = 1 firloft 4 pints 3 mutchkins, Scotch standard measure.

The above boll is = 5 bushels 1.916 cubic inches, English standard measure.

The above boll is 22.353 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.22353 \\ \text{English quarters, multiply by } .62511 \end{array} \right.$

DRY

DRY Measure:

For Oats, Bear, and Malt; raised from the firloft, containing 3515.736 cubic inches.

Standard Pint.

$$2\frac{1}{8} = \text{Lippie.}$$

$$8\frac{1}{2} = 4 = \text{Peck.}$$

$$34 = 16 = 4 = \text{Firloft.}$$

$$136 = 64 = 16 = 4 = \text{Boll.}$$

The above firloft is = 1 firloft 3 pints, Scotch standard measure.

The above boll is = 6 bushels 2 pecks, 1 quart $\frac{1}{2}$ pint 1.2 cubic inches, English standard measure.

The above boll is 9.677 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.09677 \\ \text{English quarters, multiply by } .81745 \end{array} \right.$

WEIGHTS.

Avoirdupois. $\left\{ \begin{array}{l} \text{For English Goods and Groceries, and Salt-} \\ \text{Butter in the Shops.} \\ \text{Likewise for Flesh, Butter, Cheese, Tallow,} \\ \text{Hog's Lard, and Wool, in wholesale, rec-} \\ \text{koning 28 lb. to a stone.} \end{array} \right.$

Nota. In some parts of the county, 26 lb. in others, 22 lb. go for a stone of Cheese and Butter.

Scotch Troye, or Dutch. $\left\{ \begin{array}{l} \text{For Flesh, Butter, Cheese, Tallow, Hog's} \\ \text{Lard, and Wool, in retail.} \\ \text{For Meal, reckoning 8 stone to the Boll.} \\ \text{For Coals, reckoning 36 stone to the Boll.} \end{array} \right.$

A pound of 28 oz. Avoirdupois, for Butter and Cheese in the market.

Trone. $\left\{ \begin{array}{l} \text{Reckoning 21 lb. Scotch Troye to the stone and 21} \\ \text{Scotch Troye ounces to the pound, for feathers} \\ \text{and hay.} \end{array} \right.$

ARGYLESHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY Measure :

For Beans, Pease, &c. at Inverary; raised from the firloot, containing 2554.402 cubic inches.

Alc Pint. - = $1\frac{1}{16}$ standard pints.

$1\frac{3}{4}$ = Lippie.

$5\frac{1}{8}$ = 4 = Peck.

$23\frac{1}{4}$ = 16 = 4 = Firloot.

93 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 3 pints 1 mutchkin 3 gills 6 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 3 pecks 3.1 cubic inches, English standard measure.

The above boll is 16.25 per cent. better than Scotch standard.

to convert it to { Standard bolls, multiply by 1.1625
English quarters, multiply by .59393

DRY Measure :

For Beans, Pease, &c. at Campbelltown.

DRY

D R Y M e a s u r e :

For Oats, Barley, and Malt, at Inverary; raised from the fir-
lot, containing 3438.183 cubic inches.

Standard Pints.

$$2\frac{5}{8} = \text{Lippie.}$$

$$8\frac{5}{8} = 4 = \text{Peck.}$$

$$33\frac{1}{4} = 16 = 4 = \text{FirLOT.}$$

$$133 = 64 = 16 = 4 = \text{Boll.}$$

The above firLOT is = 1 firLOT 2 pints 1 mutchkin, Scotch
standard measure.

The above boll is = 6 bushels 1 peck 9 pints 10.2 cubic
inches, English standard measure.

The above boll is 7.258 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.07258
 { English quarters, multiply by .79942

For Potatoes at Inverary.

A Peck, containing 14 pints and 1 mutchkin. Ale measure.

D R Y M e a s u r e :

For Oats, Barley, and Malt, at Campbeltown; raised from
the firLOT, containing 4125.819 cubic inches.

Standard Pints.

$$2\frac{7}{8} = \text{Lippie.}$$

$$9\frac{1}{2} = 4 = \text{Peck.}$$

$$39\frac{1}{2} = 16 = 4 = \text{FirLOT.}$$

$$159\frac{3}{4} = 64 = 16 = 4 = \text{Boll.}$$

The above firLOT is = 1 firLOT 8 pints 3 mutchkins 2 gi
2.5 cubic inches, Scotch standard measure.

Nota. The Campbeltown oat-firLOT is to that at Inverary
5 to 4.

The above boll is = 7 bushels 2 pecks 11 pints 5.5 cubic
inches, English standard measure.

The above boll is 28.709 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.28709
 { English quarters, multiply by .9593

DRY Measure :

For Potatoes, at Campbelltown.

A Peck heaped, which holds, of liquid measure, about nine English wine gallons.

WEIGHTS.

Avoirdupois. For Salt, Iron, Flour, and Groceries.

Trone. { For Fish, Flesh, Butter, Cheese, Tallow, Hay, and Wool, reckoning 24 lb. Avoirdupois to the stone.

Scotch Troye, or Dutch. For Meal.

Nota. At Inverary the boll of Meal is 8 stone Scotch Troye, 17½ lb. to the stone.

At Campbelltown the boll of Meal is 10 stone, and the peck 10 lb. Scotch Troye.

AYRSHIRE.

This shire consists of three districts,

1. KYLE, containing the town of Ayr, which is the head burgh, and Old Cumnock.
2. CARRICK, containing Girvan and Maybole.
3. CUNNINGHAM, containing Irvine, a royal borough, and Kilmarnock.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

The standards kept in the town of Ayr do not exactly tally with each other as to their contents in cubic inches, as thus.

Cub. Inches.	Gills.	
27.36	= 4	= Matchkin.
54.72	= 8	= 2 = Chopin.
110.624	= 16	= 4 = 2 = Pint.

The above pint is = 1 pint 7.22 cubic inches, Scotch standard measure.

DRY Measure.

In KYLE and CARRICK, the ancient Corn measures are reckoned to have been, at a medium, as follows.

For Wheat, Rye, Pease, and Beans, striked measure; raised from the peck, whereof $3\frac{1}{2}$ are equal to a Winchester bushel; the firloot containing 2457.6 cubic inches.

Stumpards or Forperts.

4 = Peck.

8 = 2 = Half Firloot.

16 = 4 = 2 = Firloot.

64 = 16 = 8 = 4 = Boll.

The above firloot is = 1 firloot 2 pints 1 chopin 1.7 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 2 pecks 4 pints 19.1 cubic inches, English standard measure.

The above boll is 11,844 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.11844
English quarters, multiply by .57142

For Barley, Malt, and Oats, heaped measure; raised from the half firloot, whereof $9\frac{1}{2}$ are equal to 8 Winchester bushels; the firloot containing 3621.76 cubic inches.

Stumpards or Forperts.

4 = Peck.

8 = 2 = Half Firloot.

16 = 4 = 2 = Firloot.

64 = 16 = 8 = Boll.

The above firloot is = 1 firloot 4 pints 2.6 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 2 pecks 15 pints 5.3 cubic inches, English standard measure.

The above boll is 12.985 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.12985
English quarters, multiply by .842105

DRY

DRY Measure, continued.

In paying teinds and ministers stipends, the old measure for Barley, Malt, and Oats, the firloot containing 4032.036 cubic inches, is thus :

Forpet.

$$4 = \text{Peck.}$$

$$8 = 2 = \text{Half Firloot.}$$

$$16 = 4 = 2 = \text{Firloot.}$$

$$64 = 16 = 8 = 4 = \text{Boll.}$$

The above firloot is = 1 firloot 8 pints, Scotch standard measure.

The above boll is = $7\frac{1}{2}$ Winchester bushels.

The above boll is 25.784 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.25784 \\ \text{English quarters, multiply by } .9375 \end{array} \right.$

In the District of CUNNINGHAM the old Corn measures are as follow :

For Wheat, Rye, Pease, and Beans, raised from the Cunningham Fow, striked measure.

Cubic Inches.

$$2035.756 = \text{Fow.}$$

$$10178.781 = 5 = \text{Boll.}$$

The above boll is = 1 boll 2 pecks 2 pints 3 mutchkins 1 gill, Scotch standard measure.

The above boll is = 4 bushels 2 pecks 14 pints 31.5 cubic inches, English standard measure.

The above boll is 15.808 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.15808 \\ \text{English quarters, multiply by } .59167 \end{array} \right.$

DRY Measure, continued.

In the District of CUNNINGHAM, the measure for Wheat, &c. is likewise raised from the Cunningham peck, striked measure, containing 628.256 cubic inches, thus:

Forpets.

4 = Peck.

16 = 4 = Firloot.

64 = 16 = 4 = Boll.

The above boll is = 1 firloot 3 pints 5.5 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 2 pecks 11 pints 5.6 cubic inches, English standard measure.

The above boll is 14.367 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.14367
 { English quarters, multiply by .58431

For Oats, Barley, and Malt; raised from the Cunningham Fow, striked measure, containing 2035.756 cubic inches.

Fow.

8 = Boll.

The above boll is = 1 boll 1 firloot 2 pints 1 chopin, Scotch standard measure.

The above boll is = 7 bushels 2 pecks 4 pints 23.5 cubic inches, English standard measure.

The above boll is 27.015 per cent. better than Scotch standard.

To reduce it to { Standard bolls, multiply by 1.27015
 { English quarters, multiply by .94668

DRY

DRY Measure, continued.

But these District-measures are, in common dealing, entirely laid aside in Kyle and Carrick, and also very much in Cunningham; and, in their place, the Winchester bushel is used, containing 2150.42 cubic inches, as thus:

For Wheat, Pease, and Beans.

Forpets.

4 = Peck.

16 = 4 = Bushel.

64 = 16 = 4 = Boll.

The above bushel is = 3 pecks 4 pints 3 mutchkins 1 gill 5.8 cubic inches, Scotch standard measure.

The above boll is = $\frac{1}{2}$ quarter, English standard measure.

The above boll is 2.135 per cent. less than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by .97865} \\ \text{English quarters, multiply by .5} \end{array} \right.$

For Oats, Barley, and Malt; raised also from the Winchester bushel, containing 2150.42 cubic inches.

Forpets.

4 = Peck.

16 = 4 = Bushel.

128 = 32 = 8 = Boll.

The above boll is = 1 boll 1 firlo 1 peck 3 pints 1 chopin 1 gill 6 cubic inches, Scotch standard measure.

The above boll is 34.169 per cent. better than Scotch standard.

To convert it to standard bolls, multiply by 1.34169

It is equal to an English quarter.

Potatoes measure: the peck containing 1459 cubic inches.

Peck.

16 = Boll.

Lime

Lime Measure :

A Boll ; containing 4 Winchester bushels.

Coals at Ayr.

A Box ; containing nearly 5 Winchester bushels, and *reputed* the eighth part of a ton weight. *But see General Tables, N^o XI.*

WEIGHTS.

Trone. { The pound, containing 24 oz. Avoirdupois, the stone
24 lb. Avoirdupois ; for Butter, Cheese, Butcher-
meat, Hay, and Wool, of which last 13 stones
make a pack.

Scotch Troye. For Meal, reckoning 8 stone to the boll.

Avoirdupois. { For Iron, Flour, Fine Barley, Salmon, and
all sort of Groceries.

BANFFSHIRE.

LINEAL Measure :

As in the General Tables.

LIQUID Measure ; raised from the pint, contain-
ing 105.284 cubic inches.

Gill.

4 = Mutchkin.

8 = 2 = Chopin.

16 = 4 = 2 = Pint.

32 = 8 = 4 = 2 = Quart.

128 = 32 = 16 = 8 = 4 = Gallon.

Nota. The Banffshire pint is to the Stirling jug as 56 to 55.

DRY

DRY Measure :

For Wheat, Beans, Pease, Rye, and White Salt ; raised from the firlo, containing 2316.248 cubic inches.

Banff Pints.

$1\frac{3}{8} =$ Lippie.

$5\frac{1}{2} = 4 =$ Peck.

$22 = 16 = 4 =$ Firlo.

$88 = 64 = 16 = 4 =$ Boll.

The above firlo is $= 1$ firlo 1 pint 2 gills 2.58 cubic inches, Scotch standard measure.

The above boll is $= 4$ bushels 1 peck 3 pints 25 cubic inches, English standard measure.

The above boll is 5.411 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.05411 \\ \text{English quarters, multiply by } .53855 \end{array} \right.$

Nota. At Banff, White Salt is often sold at 2 cwt. Avoirdupois, for the boll.

For Oats, Barley, and Malt ; raised from the firlo, containing 3369.088 cubic inches.

Banff Pints.

$2 =$ Lippie.

$8 = 4 =$ Peck.

$32 = 16 = 4 =$ Firlo.

$128 = 64 = 16 = 4 =$ Boll.

The above firlo is $= 1$ firlo 1 pint 1 chopin 1 gill 2 cubic inches, Scotch standard measure.

The above boll is $= 6$ bushels 1 peck 1 pint 2.6 cubic inches, English standard measure.

The above boll is 5.103 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.05103 \\ \text{English quarters, multiply by } .78335 \end{array} \right.$

For

COUNTY-TABLES.

For English Coal.

A Barrel, containing 72 Banff pints.

WEIGHTS.

Avoirdupois. For English Goods and Groceries.

Scotch Troye, { For Meal, reckoning 8 stone to the boll.
 or Dutch. { For Scotch Coal, reckoning 20 stone to the
 weigh.
 { For Green Hides and Butcher-meat.

Trone. For Hay, Wool, Butter, Cheese, and Tallow.

Nota. The Trone stone for Butter, Cheese, and Tallow, varies as under.

In Banff and Portsoy markets, each Trone stone contains 24 lb. Scotch Troye.

In the fairs of Keith, Cornhill, Ruthven, and Fordyce, the Trone stone contains 22 lb. Scotch Troye.

BERWICKSHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY Measure :

For all sorts of Corn.

At BERWICK the boll is exactly equal to 6 Winchester bushels. Through the county of Berwick it is much larger.

At

DRY Measure, continued :

For all sorts of Corn.

At DUNSE, and in the neighbourhood thereof, the boll is about 8 per cent. better than the standard oat-boll.

At LAUDER, the only royal borough in the county, the standards are the rule in dealing with Lothian; but being there in the neighbourhood of Roxburghshire, they use much the five-firлот boll of that county.

The medium of the BERWICKSHIRE measure is held to stand thus; raised from the firлот, containing 3360.63 cubic inches.

Pint.

$$2\frac{1}{2} = \text{Cap.}$$

$$8\frac{1}{8} = 4 = \text{Peck.}$$

$$32\frac{1}{2} = 16 = 4 = \text{Firлот.}$$

$$130 = 64 = 16 = 4 = \text{Boll.}$$

The above firлот is = 1 firлот 1 pint 2 mutchkins, Scotch standard measure.

The above boll is = 6 bushels 1 peck 2.4 cubic inches, English standard measure.

The above boll is 4.838 per cent. better than the standard oat-boll; and 52.941 per cent. better than the standard wheat-boll: besides, in the sales of oats and barley, a boll is given to the score, which is 5.241 per cent. more.

To convert it to { English quarters, multiply by .78139
Standard oat-bolls, multiply by 1.0438
Standard wheat-bolls, multiply by 1.52941

WEIGHTS.

WEIGHTS.

At BERWICK and EYMOUTH.

The Northumberland stone, of 24 lb. English. For Wool.

A pound, of 18 oz. Avoirdupois. For Sweet Butter, and Fish.

Avoirdupois weight. For all other goods.

At DUNSE.

Scotch Troye, or Dutch weight. For Fleth, Meal, and Flour.

Trone stone, of 23 lb. Avoirdupois. For Butter, Cheese, Raw Hides, and Tallow.

Avoirdupois weight. For Groceries and Shop goods.

At COLDSTREAM.

The Northumberland stone, of 24 lb. English. For Wool.

Trone stone, { of 23 lb. 8 oz. Avoirdupois. For Tallow, and Raw Hides.
of 21 lb. 14 oz. Avoirdupois. For Hay.

Avoirdupois weight. For Butcher-meat, and English Goods and Groceries.

At LAUDER.

The Trone stone, of 16 lb. each pound, containing 22 oz. Avoirdupois. For Butter, Cheese, Hides, Wool, and other home goods.

BUTESHIRE and ARRAN.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY

DRY Measure :

For Corn imported, the standards are the rule; but for the produce of Bute and Arran, the measures are as follow, viz.

For Wheat, Pease, and Beans; raised from the firloot, containing 2878.078 cubic inches.

Standard Pint.

$$6.958 = \text{Peck.}$$

$$27.833 = 4 = \text{FirLOT.}$$

$$111.333 = 16 = 4 = \text{Boll.}$$

The above firloot is = 1 firloot 6 pints 1 chopin 1 gill 2.157 cubic inches, Scotch standard measure.

The above boll is = 5 bushels 1 peck 6 pints 21 cubic inches, English standard measure.

The above boll is 30.98 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.3098 \\ \text{English quarters, multiply by } .66919 \end{array} \right.$

For Oats, Barley, and Malt, the produce of Bute and Arran; raised from the firloot, containing 4317.117 cubic inches.

Standard Pints.

$$10\frac{7}{8} = \text{Peck.}$$

$$41\frac{3}{4} = 4 = \text{FirLOT.}$$

$$167 = 16 = 4 = \text{Boll.}$$

The above firloot is = 1 firloot 10 pints 3 mutchkins, Scotch standard measure.

The above boll is = 1 quarter 1 pint $31\frac{1}{2}$ cubic inches, English standard measure.

The above boll is 34.677 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.34677 \\ \text{English quarters, multiply by } 1.00378 \end{array} \right.$

For Potatoes.

The measure, in Rothsay, is a peck of 16 standard pints; and a boll of 16 striked pecks. In the country, the measure is somewhat less than at Rothsay.

WEIGHTS.

Trone, reckoning 24 lb. Avoirdupois to the stone. For Beef, Mutton, Butter, Cheese, Tallow, Raw Hides, Wool, Lint, Hemp, Hay, and Straw.

Scotch Troye, or Dutch.	{ For Pork. reckoning 9 stone to the boll. For Meal, the growth of Bute. reckoning 8 stone to the boll. For Meal im- ported.
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Nota. Meal, in Arran, is sold by the boll of 8 stone Dutch; and, except in this particular, the weights and measures in Arran are the same as in Bute.

CAITHNESS-SHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY

DRY Measure :

For Oats and Barley; raised from the firLOT, containing 3405.87 cubic inches.

Standard Pints.

$$\begin{aligned} 2\frac{1}{2} &= \text{Lippie.} \\ 8\frac{1}{2} &= 4 = \text{Peck.} \\ 32\frac{1}{2} &= 16 = 4 = \text{FirLOT.} \\ 65\frac{1}{2} &= 32 = 8 = 2 = \text{Belly measure.} \\ 131\frac{1}{2} &= 64 = 16 = 4 = 2 = \text{Boll.} \end{aligned}$$

The above firLOT is = 1 firLOT 1 pint 3 mutchkins 3 gills
Scotch standard measure.

The above boll is = 6 bushels 1 peck 5 pints 15.3 cubic inches, English standard measure.

The above boll is 6.25 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.0625
English quarters, multiply by .791908

Nota. No Wheat, Pease, or Beans, are, in this shire, brought to market.

WEIGHTS.

Scotch Troye, or Dutch. For Meal, reckoning $8\frac{1}{2}$ stone to the boll.

Trone, reckoning 24 lb. Scotch Troye to the stone. For Butter, Cheefe, Wool, Tallow, and Feathers.

DUMBARTONSHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID

LIQUID Measure.

The Dumbarton Pint contains only 100.5 cubic inches, which is 2.9 cubic inches less than the standard pint.

DRY Measure:

For Wheat, Pease, Beans, and Meal; raised from the firlo, containing 2562.75 cubic inches.

Dumbarton Pint.

$$\begin{aligned} 1\frac{1}{3}\frac{1}{2} &= \text{Lippie.} \\ 6\frac{3}{8} &= 4 = \text{Peck.} \\ 25\frac{1}{2} &= 16 = 4 = \text{Firlo.} \\ 102 &= 64 = 16 = 4 = \text{Boll.} \end{aligned}$$

The above firlo is = 1 firlo 3 pints 1 chopin 3.5 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 3 pecks 1 pint 2.9 cubic inches, English standard measure.

The above boll is 16.63 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.1663 \\ \text{English quarters, multiply by } .59587 \end{array} \right.$

DRY

DRY Measure:

For Oats, Barley, and Malt; raised from the firloot, containing 3417 cubic inches.

Dumbarton Pint.

$2\frac{1}{8}$ = Lippie.

$8\frac{1}{2}$ = 4 = Peck.

34 = 16 = 4 = Firloot.

136 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 2 pints 4.668 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 1 peck 6 pints 26.2 cubic inches, English standard measure.

The above boll is 6.597 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.06597
 { English quarters, multiply by .79449

Nota. The wheat-peck, heaped, is used for measuring a peck of oats or barley.

Potatoes are measured by a peck of 15 pints 3 mutchkins. — This peck is striked, or rather rounded, (but not heaped), whereof 16 make a boll.

By a regulation, in 1773, Lime is sold by a Winchester bushel, kept at Dumbarton, containing 21 Scotch standard pints. 4 of these bushels make the boll.

WEIGHTS.

Trone, each stone consisting of 23 lb. Avoirdupois, or 16 lb. of 23 oz. Avoirdupois each. For Butter, Cheese, Butcher-meat, Fish, and Scotch Lint.

Scotch Troye, or Dutch.

Avoirdupois. For English Goods and Groceries.

DUM.

DUMFRIES-SHIRE; and part of KIRK- CUDBRIGHT STEWARTRY.

This shire antiently comprehended the ten parishes lying between Nith and Orr, which are now part of Kirkcudbright stewartry; they are still called the *Dumfries Presbytery*, and use the same weights and measures as in Dumfriesshire.

LINEAL Measure.

As in the General Tables; except that

The Langholm Ell is $37\frac{1}{8}$ inches.

LIQUID Measure.

The ancient standard pint in the burgh of Dumfries contains 114 cubic inches, = 1 standard pint 10.596 cubic inches.

DRY Measure:

Is various in this county. The Winchester bushel is now most in use. Among their old measures, for all sorts of Corn, were,

1st, The Moffat Peck, used in the upper part of Annandale. It contains 18 Scotch pints; 16 of these pecks, striked measure, make a Moffat boll, which is = 1 quarter 5 bushels 3 pecks 6 pints $10\frac{1}{2}$ cubic inches, Winchester measure.

2^{dly}, The Annan Cap, in Annan and the middle part of Annandale, (but now laid aside entirely), contains 7 pints 1 mutchkin $1\frac{3}{4}$ gills Scotch measure; 24 of these heaped, make an Annan boll, which is = 1 quarter 3 bushels 2 pecks 2 pints 20 cubic inches Winchester measure.

3^{dly}, The Langholm Peck, used in Eskdale, containing $16\frac{1}{2}$ Scotch pints; 16 of these pecks, striked measure, make the Langholm boll, which is = 1 quarter 4 bushels 2 pecks 12 pints 15 cubic inches Winchester measure.

DRY

DRY Measure, continued.

4thly, The Carlisle bushel, used in Eskdale and the lower part of Annandale; it consists of 4 pecks striked measure, and is = 3 Winchester bushels.

5thly, The Roxburghshire boll is much used in Eskdale, and is generally understood when a boll is mentioned.

6thly, The Nithsdale or Dumfries Peck, a striked measure, is the most general of the old measures, and is used in Nithsdale, comprehending the presbyteries of Dumfries and Penpont; also in Lochmaben and some parts of Annandale, and in the ten parishes betwixt Nith and Orr, part of Kirkcudbright. This measure stands as follows:

For Wheat, Pease, Beans, and Meal, which are generally reckoned by pecks; the peck striked containing 1660 cubic inches.

Dumfries Pint.

.907 = Standard Pint.

3.64 = 4.01 = Forpet.

14.56 = 16.05 = 4 = Peck striked.

232.96 = 256.8 = 64 = 16 = Boll.

The Dumfries pint is = 1 pint 1 gill 4.134 cubic inches, Scotch standard measure.

The above boll is = 3 bolls 1 pint 3 mutchkins 1 gill 4.5 cubic inches, Scotch standard measure.

The above boll is = 1 quarter 4 bushels 1 peck 6 pints 15.7 cubic inches, English standard measure.

The above boll is 202.184 per cent. better than Scotch standard.

To convert it to. { Standard bolls, multiply by 3.02184
 { English quarters, multiply by 1.54388

K

DRY

D R Y Measure, continued :

For Oats, Barley, and Malt, which are generally reckoned by the boll, the peck heaped containing 2150.42 cubic inches.

Dumfries Pint.

.907 = Standard Pint.

4.71 = 5.2 = Forpet.

18.86 = 20.8 = 4 = Peck heaped.

301.81 = 332.64 = 64 = 16 = Boll.

The above peck is = 1 Winchester bushel.

The above boll is = 2 bolls 2 firloths 22 pints 1 chopin 24.9 cubic inches, Scotch standard measure.

The above boll is = 2 English quarters.

The above boll is 168.339 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 2.68339
 { English quarters, multiply by 2.

W E I G H T S ,

Trone, reckoning 24 lb. to the stone. For Butter, Cheese, Tallow, Wool, Raw Hides, Bark, and Hay.

Nota. In some places, particularly in Eskdale, a pound Trone, viz. 24 oz. Avoirdupois, is given to the stone. — In the upper part of Nithsdale, the Trone stone contains only 22 lb. Avoirdupois.

Scotch Troye, or Dutch, reckoning 17½ lb. Avoirdupois to the stone. For Iron, Oat Meal, when sold by stones; and in Eskdale for Butcher-meat.

Avoirdupois, reckoning 16 lb. to a stone. For Butcher-meat, Bale-Goods, and Groceries.

At Annan, Butcher-meat and Cheese are sold by the stone of 14 lb.

Coals are sold by a tun, which weighs only about 14 cwt.

EDIN.

EDINBURGHSHIRE, or MID-LOTHIAN.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY Measure.

The legal standards, as in the General Tables, are the rule for all sorts of Corn; and in Leith are strictly observed. The firlots are stamped with the words *Edinburgh measure*. The town's Cooper also makes and gives out firlots stamped with the name of *Linlithgow measure*. These are more frequently called for than the others, and stand thus:

For Wheat, Pease, and Beans; raised from the firlot, containing 2236.111 cubic inches.

Pint.

$$1\frac{45}{128} = \text{Lippie.}$$

$$5\frac{13}{32} = 4 = \text{Peck.}$$

$$21\frac{10}{16} = 16 = 4 = \text{FirLOT.}$$

$$86\frac{1}{2} = 64 = 16 = 4 = \text{Boll.}$$

The above firLOT is = 1 firLOT 1 mutchkin 2 gills Scotch standard measure.

The above boll is = 4 bushels 10 pints 6.7 cubic inches, English standard measure.

The above boll is 1.764 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.01764 \\ \text{English quarters, multiply by } .51992 \end{array} \right.$

DRY Measure :

For Oats, Barley, and Malt; raised from the firloot, containing 3257.226 cubic inches.

Standard Pint.

$$\begin{aligned} 1\frac{3}{4} &= \text{Lippic.} \\ 7\frac{7}{8} &= 4 = \text{Peck.} \\ 31\frac{1}{2} &= 16 = 4 = \text{FirLOT.} \\ 126 &= 64 = 16 = 4 = \text{Boll.} \end{aligned}$$

The above firloot is = 1 firloot 1 chopin, Scotch standard measure.

The above boll is = 6 bushels 3 pints 25.5 cubic inches, English standard measure.

The above boll is 1.613 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.0613
 { English quarters, multiply by .75734

WEIGHTS.

Trone, as in the General Tables. For Tallow, Scotch Lint, Hemp, Hay, Butter, Cheese, and Wool.

Nota In weighing Butter and Cheese, 8 oz. Scotch Troye are added to the stone, which thus amounts to $20\frac{1}{2}$ Scotch Troye Pounds. And,

In weighing Wool, 1 lb. Trone, or 1 lb. 6 oz. Avoirdupois, is added to the stone, which thus amounts to 23 lb. 2 oz. Avoirdupois.

Scotch Troye, or Dutch. For Butcher-meat, Iron, Feathers, Old Lead, and Pewter.

Nota. The 100 lb. Dutch is, at Leith, reckoned 109 lb. Avoirdupois.

Avoirdupois. For all other Merchant Goods and Groceries; also for Coals, reckoning 33 cwt a deal, and 12 cwt a cart-load.

ELGIN

ELGIN and FORRES SHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

The pint of Elgin contains 105.438 cubic inches, which is 2.034 cubic inches more than the standard pint.

It contains, of running water, 3 lb. 13 oz. Avoirdupois.

DRY Measure :

For Wheat, Rye, Pease, and Beans; raised from the firlo, containing 2346.006 cubic inches.

Pint of Elgin.

$$1\frac{2}{3} = \text{Lippie.}$$

$$5\frac{2}{3} = 4 = \text{Peck.}$$

$$22\frac{1}{4} = 16 = 4 = \text{FirLOT.}$$

$$89 = 32 = 16 = 4 = \text{Boll.}$$

The above firLOT is = 1 firLOT 1 pint 2 mutchkins 3 gills, Scotch standard measure.

The above boll is = 4 bushels 1 peck 7 pints 9.5 cubic inches, English standard measure.

The above boll is 6.765 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.06765 \\ \text{English quarters, multiply by } .54546 \end{array} \right.$

DRY

DRY Measure, continued:

For Barley; raised from the firloft, containing 3374.032 cubic inches.

Pints of Elgin.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloft.

128 = 32 = 16 = 4 = Boll.

The above firloft is = 1 firloft 1 pint 2 mutchkins 2 gills, Scotch standard measure.

The above boll is = 6 bushels 1 peck 1 pint 22.4 cubic inches, English standard measure.

This boll is 5.256 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.05256
 { English quarters, multiply by .784505

For Oats.

Pints of Elgin.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloft.

160 = 80 = 20 = 5 = Boll.

This firloft is the same with the above barley-firloft.

The above boll is = 7 bushels 3 pecks 6 pints 2.8 cubic inches, English standard measure.

The above boll is 31.57 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.3157
 { English quarters, multiply by .98063

The boll of oats runs from 5 to 8 firlofts, according to the quality of the grain, the idea here of a boll of oats being what will produce a boll of meal; so that in some places where the grain is good, 18 or 19 pecks will make a boll.

There are 8 firlofts of black oats to the boll.

WEIGHTS.

WEIGHTS.

Scotch Troye, { For Butcher-meat, and Dutch Goods.
or Dutch. { For Meal, by a boll of 9 stones, and peck of
9 lb.

Avoirdupois. { For English Goods, and Groceries.
{ For Flower, by a peck of 8 lb.
{ For Native Salt, by a boll of 2 cwt.
{ For Foreign Salt, by a boll of 3 cwt.

Trone, { Reckoning 21 Scotch Troye Pounds to the stone,
{ For Wool, Butter, Cheese, Lint of Scotch pro-
duct, and Hay.

FIFESHIRE.

LINEAL Measure.

Scotch Woolen Cloth, by an Ell of $37\frac{1}{8}$ English inches,

All other goods as in the General Tables.

LIQUID Measure.

As in the General Tables.

DAY

D R Y Measure.

The Linlithgow standards are held to be the rule for Corn of all kinds; but as it appears these are generally made larger than the legal standards, (see Linlithgow), so here they will stand, at a medium, thus :

For Wheat, Pease, and Beans ; raised from the firlo, containing 2274.888 cubic inches.

Standard Pints.

$1\frac{3}{8} =$ Forpet.

$5\frac{1}{2} = 4 =$ Peck.

22 = 16 = 4 = Firlo.

88 = 64 = 16 = 4 = Boll.

The above firlo is = 1 firlo 3 mutchkins, Scotch standard measure.

The above boll is = 4 bushels 14 pints 27.4 cubic inches, English standard measure.

The above boll is 3.529 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03529
English quarters, multiply by .52894

For Oats, Barley, and Malt ; raised from the firlo, containing 3308.928 cubic inches.

Standard Pints.

2 = Forpet.

8 = 4 = Peck.

32 = 16 = 4 = Firlo.

128 = 64 = 16 = 4 = Boll.

The above firlo is = 1 firlo 1 pint, Scotch standard measure.

The above boll is = 6 bushels 9 pints 30.8 cubic inches, English standard measure.

The above boll is 3.225 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03225
English quarters, multiply by .76936

Nota. Apples are sold by the Barley measure, heaped.

WEIGHTS.

WEIGHTS.

Avoirdupois. For English Goods and Groceries.

Scotch Troye, { For Butcher-meat, Meal, Foreign Flax and
or Dutch. { Hemp, Iron, and Dutch goods.

Trone. { Reckoning 16 Scotch Troye pounds to the stone, and
20 Scotch Troye ounces to the pound. For Scotch
Wool, Butter, Cheese, Hides, and other Scotch
productions.

FORFARSHIRE.

LINEAL Measure.

As in the General Tables; except

In Brechin, the ell for Scotch Woolen is $37\frac{1}{4}$ inches.

LIQUID Measure.

As in the General Tables.

DRY Measure :

For Wheat, Pease, and Beans.

At Montrose, } The Wheat-firiot contains 22 pints.
and Forfar.

At Arbroath. The Wheat-firiot contains $22\frac{1}{8}$ pints.

At Dundee, } The Wheat-firiot contains $21\frac{1}{2}$ pints.
and Brechin.

L

DRY

DRY Measure, continued.

The medium of Forfarshire measure for Wheat, &c.; raised from the firlof, containing 2274.888 cubic inches, is as follows :

Pint.

$1\frac{3}{8}$

= Cap.

$5\frac{1}{2}$

= 4 = Peck.

22

= 16 = 4 = Firlof.

88

= 64 = 16 = 4 = Boll.

The above firlof is = 1 firlof 3 mutchkins, Scotch standard measure.

The above boll is = 4 bushels 14 pints 27.4 cubic inches, English standard measure.

The above boll is 3.529 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03529
English quarters, multiply by .52894

For Oats, Barley, and Malt.

At Brechin, }
Monrofe, and } The Oat-firlof contains $32\frac{1}{2}$ pints.
Kirriemuir. }

At Forfar. The Oat-firlof contains 32 pints.

At Dundee. The Oat-firlof contains $31\frac{1}{2}$ pints.

At Arbroath. The Oat-firlof contains $31\frac{1}{4}$ pints.

DRY

DRY Measure, continued.

The medium of Forfarshire measure for Oats, &c.; raised from the firloot, containing 3321.853 cubic inches, is as follows:

Pint.

$$2\frac{1}{128} = \text{Cap.}$$

$$8\frac{1}{32} = 4 = \text{Peck.}$$

$$32\frac{1}{8} = 16 = 4 = \text{Firloot.}$$

$$128\frac{1}{2} = 64 = 16 = 4 = \text{Boll.}$$

The above firloot is = 1 firloot 1 pint 2 gills, Scotch standard measure.

The above boll is = 6 bushels 11 pints 15.3 cubic inches, English standard measure.

The above boll is 3.629 per cent. larger than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03629
 { English quarters, multiply by .77237

WEIGHTS.

Avoirdupois. For English Goods and Groceries.

Scotch Troyé, { For Meal, 8 stones to the boll.
 or Dutch. { For Coals, 70 stones to the boll (at Arbroath).
 { For Butcher-meat.
 { For Dutch Goods, and Goods from the Baltic.

Nota. In sales of Dutch Goods, and Goods from the Baltic, at Montrose and Brechin, to the amount of 20 stones, or upwards, importers allow one to the score.

Trone stone { For Home Flax, Wool, Butter, and Cheese.
 of 16lb.

Nota. The Pound of the above Trone stone, varies in weight as under.

At Montrose,
 Brechin,
 Forfar. } Each lb. contains 24 oz. Avoirdupois.

At Dundee,
 Arbroath,
 Cupar. } Each lb. contains 22 oz. Avoirdupois.

At Glamis. Each lb. contains 26 oz. Avoirdupois.

At Kirriemuir. Each lb. contains 27 oz. Avoirdupois.

HADDINGTONSHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY Measure.

The Linlithgow standards are held to be the rule for all kinds of Corn; but these, as appears, generally exceed the legal standards, (see Linlithgow), and here they will stand, at a medium, thus:

For Wheat, Pease, and Beans; raised from the firloot, containing 2261.962 cubic inches.

Standard Pint.

$$\begin{aligned} 1\frac{47}{128} &= \text{Forpet.} \\ 5\frac{15}{32} &= 4 = \text{Peck.} \\ 21\frac{7}{8} &= 16 = 4 = \text{Firloot.} \\ 87\frac{1}{2} &= 64 = 16 = 4 = \text{Boll.} \end{aligned}$$

The above firloot is = 1 firloot 1 chopin 2 gills, Scotch standard measure.

The above boll is = 4 bushels 13 pints 9.4 cubic inches, English standard measure.

The above boll is 2.941 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.02941
 { English quarters, multiply by .52593

DRY Measure, continued.

For Oats, Barley, and Malt; raised from the firloft, containing 3302.464 cubic inches.

Standard Pint.

$$1\frac{25}{80} = \text{Forpet.}$$

$$7\frac{63}{80} = 4 = \text{Peck.}$$

$$31\frac{1}{8} = 16 = 4 = \text{Firloft.}$$

$$127\frac{3}{4} = 64 = 16 = 4 = \text{Boll.}$$

The above firloft is = 1 firloft 3 mutchkins 3 gills, Scotch standard measure.

The above boll is = 6 bushels 9 pints 4.9 cubic inches, English standard measure.

The above boll is 3.024 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.03024 \\ \text{English quarters, multiply by } .76786 \end{array} \right.$

WEIGHTS.

Avoirdupois. For English Goods and Groceries.

Scotch Troye, or Dutch. For Meal, and Butcher-meat.

Trone. $\left\{ \begin{array}{l} \text{Reckoning 20 lb. Scotch Troye to the stone; for} \\ \text{Home Goods.} \end{array} \right.$

IN-

INVERNESS-SHIRE.

LINEAL Measure.

As in the General Tables ; except

Coarse Linens and Woolens, by an Ell of 38 inches.

LIQUID Measure.

A pewter pint-jug, marked 1652, kept at Inverness, is the standard of the measures of capacity, both for liquids and things dry. It has, on the inside, a plouk or knob; and a little above the plouk, a hole drilled through, which is stopped up when they want to fill the jug to the brim. The jug, filled to the plouk, regulates the firloft for Wheat, Pease, Rye, and Meal; filled to the hole, regulates the Barley and Oat firloft; and, filled to the brim, is the standard for liquid measure, viz. of Fish-oil, Scotch Spirits, Ale, &c.

The weight of clear running water of the river Ness, contained in

		Avoird.		Cub. Inches.
		lb.	oz. dr.	
The Wheat pint, is	-	3	12 10	= 104.7903
The Barley pint,	-	3	15 10	= 109.9758
The Liquid pint,	-	4	2 10	= 115.1613

The pint is subdivided as in other places.

DRY

DRY Measure:

For Wheat, Pease, Beans, Rye, Ryegrass-seed, and formerly for Meal; raised from the firloft, containing 2514.967 cubic inches.

Pint of Inverness.

$1\frac{1}{2}$ = Lippie.

6 = 4 = Peck.

24 = 16 = 4 = Firloft.

96 = 64 = 16 = 4 = Boll.

The above pint is = 1 pint 1.386 cubic inches, Scotch standard measure.

The above firloft is = 1 firloft 3 pints 1 gill .95 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 2 pecks 11 pints 13.37 cubic inches, English standard measure.

The above boll is 14.455 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.14455
 { English quarters, multiply by .58476

For Barley, and Malt; raised from the firloft, containing 3519.225 cubic inches.

Pint of Inverness.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloft.

128 = 64 = 16 = 4 = Boll.

The above pint is = 1 pint 6.571 cubic inches, Scotch standard measure.

The above firloft is = 1 firloft 3 pints 3.5 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 2 pecks 2 pints 32 cubic inches, English standard measure.

The above boll is 9.786 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.09786
 { English quarters, multiply by .81826

DRY

D R Y Measure, continued:

For Oats; raised from the firloft, containing 3519.225 cubic inches.

Pint of Inverness.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloft.

160 = 80 = 20 = 5 = Boll.

The above boll is = 1 quarter 11 pints 23.16 cubic inches, English standard measure.

A boll of Oats, in this county, is reckoned what will yield a boll of Meal; and so may sometimes contain fix or more firlots, but generally five: therefore, at that rate,

The above boll is 37.232 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.37232
English quarters, multiply by 1.02283

N. B. When oats are sold to go out of the county, the bargain generally expresses 4 firlots only to the boll, in which case the measure is as in Barley.

Coals: By the barrel of 3 heaped Winchester bushels each.

W E I G H T S.

Are here very inaccurate, generally above the standard, and disagreeing with one another.

Scotch Troye, } For Meal, reckoning 9 stone to the boll.
or Dutch.

Trone. For Wool, Butter, Cheese, and Butcher-meat.

Nota. The Trone stone is said to be equal to 21 lb. Amsterdam, and also equal to 24 lb. Avoirdupois, and the Trone pound equal to 21 oz. Amsterdam.

Avoirdupois. { For Groceries.
Also for Flour, by the boll of 16 pecks, each
peck weighing 8 lb.

KIN.

KINCARDINESHIRE.

LINEAL Measure.

The English Yard, for English Cloths of all kinds.

The Plaiding Ell, of $38\frac{1}{2}$ inches, for Home Manufactures, and Labourers and Tradesmens work.

LIQUID Measure.

As in the General Tables.

DRY Measure :

For Wheat, Rye, and Pease ; raised from the firloft, containing 2481.696 cubic inches.

Standard Pint.

$1\frac{1}{2}$ = Lippie.

6 = 4 = Peck.

24 = 16 = 4 = Firloft.

96 = 64 = 16 = 4 = Boll.

The above firloft is = 1 firloft 2 pints 3 mutchkins, Scotch standard measure.

The above boll is = 4 bufhels 2 pecks 7 pints 14.7 cubic inches, English standard measure.

The above boll is 12.941 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.12941
 { English quarters, multiply by .57702

D R Y M e a s u r e :

For Oats, and Barley ; raised from the firloot, containing
3412.332 cubic inches.

Standard Pint.

$2\frac{1}{8} =$ Lippie,

$8\frac{1}{4} = 4 =$ Peck.

$33 = 16 = 4 =$ Firloot.

$132 = 64 = 16 = 4 =$ Boll.

The above firloot is $= 1$ firloot 2 pints, Scotch standard measure.

The above boll is $= 6$ bushels 1 peck 6 pints 7.6 cubic inches, English standard measure.

The above boll is 6.451 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.06451 \\ \text{English quarters, multiply by } .79341 \end{array} \right.$

Nota. The measure of Bervie is reckoned only $32\frac{1}{2}$ pints to the firloot.

W E I G H T S.

Avoirdupois. $\left\{ \begin{array}{l} \text{For English Goods.} \\ \text{For Salt, reckoning 17 stone to the boll, each} \\ \text{stone consisting of 16 lb.} \end{array} \right.$

Trone. $\left\{ \begin{array}{l} \text{Reckoning 16 lb. to the stone, and 26 oz. Scotch} \\ \text{Troye to the pound ; for Wool, Butter, Cheese,} \\ \text{and Tallow.} \end{array} \right.$

Scotch Troye,
or Dutch. $\left\{ \begin{array}{l} \text{For other Home Goods.} \\ \text{For Meal, reckoning 8 stone to the boll.} \\ \text{For Scotch Coal, reckoning 72 stone to the boll.} \\ \text{For English Coal, reckoning 36 stone to the} \\ \text{boll.} \\ \text{For Hay, reckoning 20 lb. to the stone.} \end{array} \right.$

K I N -

KINROSS-SHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

DRY Measure.

The weights and measures in this county being very various, and particularly the Corn-measure, being generally a peck to the boll, the justices of peace, in the year 1775, provided a set of standards from Linlithgow, which were deposited with the clerk of peace; and they made public intimation, requiring the dealers, and other inhabitants, to bring in their weights and measures, to be adjusted by the standards, and they ordered the standards to be the rule in all time coming. But, in 1778, the corn-firlots being tried by the weight of water which they contained, the same were found as follow :

For Wheat, Pease, and Beans; raised from the firlot, containing 2255.5 cubic inches.

Standard Pint.

$$1\frac{9}{16} = \text{Lippie.}$$

$$5\frac{3}{4} = 4 = \text{Peck.}$$

$$21\frac{1}{8} = 16 = 4 = \text{Firlot.}$$

$$87\frac{1}{8} = 64 = 16 = 4 = \text{Boll.}$$

The above firlot is = 1 firlot 1 chopin 1 gill, Scotch standard measure.

The above boll is = 4 bushels 12 pints 17.1 cubic inches, English standard measure.

The above boll is 2.647 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.02647
English quarters, multiply by .52443

DRY Measure, continued :

For Oats, Barley, and Malt ; raised from the firloot, containing 3302.465 cubic inches.

Standard Pint.

$$12\frac{5}{8} = \text{Lippie.}$$

$$7\frac{6}{8} = 4 = \text{Peck.}$$

$$31\frac{1}{8} = 16 = 4 = \text{FirLOT.}$$

$$127\frac{1}{8} = 64 = 16 = 4 = \text{Boll.}$$

The above firloot is = 1 firloot 3 mutchkins 3 gills, Scotch standard measure.

The above boll is = 6 bushels 9 pints 4.9 cubic inches, English standard measure.

The above boll is 3.024 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03024
 { English quarters, multiply by .76786

WEIGHTS.

Scotch Troye, or Dutch. For Butcher-meat, and Meal.

Trone. For Butter, Cheefe, Wool, Rough Hides, and Hay.

Avoirdupois. For Groceries.

KIRK-

KIRKCUDBRIGHT STEWARTRY.

Including only the weights and measures of sixteen parishes, which lie between Orr and Cree, formerly part of Galloway, viz.

Kirkcudbright, Rerick, Kelton, Buitie, Crofsmichael, Par-ton, Balmacellan, Dalry, Carsfairn, Kells, Balmaghie, Tong-land, Tynholmie, Borge, Girton, and Anwath.

For the weights and measures of the parishes of Kirkma-breck and Minigaff, *See* Wigtonshire.

For those of the ten parishes between Nith and Orr, (for-merly part of Dumfriesshire), viz Kirkpatrick-Durham, Iron-gray, Orr, Lochrooton, Troqueer, New Abbey, Kirkbean, Colvend, Kirkgunion, and Terreagles, *See* Dumfriesshire, and Nithsdale.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

A pint-jug, kept as a standard, contains 122 cubic inches.

The standard mutchkin only 28.875 cubic inches, which is equal to the English wine-pint.

DRY

DRY Measure :

For Corn, is raised from the peck, which is regulated by an old iron rod, ascertaining the diameter of this peck to be 22 inches, and its depth $4\frac{7}{8}$, which would make its solid contents = 1853.151 cubic inches, = 17.921 Stirling pints; but the practice of the country deviates from this standard, the peck in common use containing only 14 pints 10 gills, Kirkcudbright measure, = $1784\frac{1}{4}$ cubic inches, and will stand thus :

For Wheat, Rye, Pease, and Beans.

Kirkcudbright Pint.

$1\frac{5}{8}$ = Forpet.

$7\frac{5}{8}$ = 4 = Auchlet, or Half Peck.

$14\frac{1}{8}$ = 8 = 2 = Peck Striked.

117 = 64 = 16 = 8 = Boll.

The above pint is = 1 pint 18.596 cubic inches, Stirling measure.

The above boll is = 1 boll 2 firlots 1 peck 5 pints 3 gills 4.25 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 2 pecks 8 pints 27.46 cubic inches, English standard measure.

The above boll is 62.401 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.62401
 { English quarters, multiply by .82972

DRY

DRY Measure, continued :

For Oats, Barley, and Malt,

Is raised from the heaped Pease-peck, which makes the boll, as nearly as can be ascertained, = $10\frac{3}{4}$ Winchester bushels; but, in practice, 11 Winchester bushels are given for the boll; so the measure will stand thus :

Kirkcudbright Pint.

3.03 = Forpet.

12.12 = 4 = Auchlet, or Half Peck.

24.24 = 8 = 2 = Peck Heaped.

193.88 = 64 = 16 = 8 = Boll.

The above boll is = 1 boll 3 firlots 1 peck 4 pints .95 cubic inches, Scotch standard measure.

The above boll is = 1 quarter 3 bushels, English standard measure.

The above boll is 84.483 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.84483
 { English quarters, multiply by 1.375

WEIGHTS.

Avoirdupois. { For Butcher-meat, and English Goods and Groceries.

Scotch Troye, { For Meal, reckoning $17\frac{1}{2}$ lb. Avoirdupois to
 or Dutch. { the stone.

Trone, reckoning 16 lb. to the stone. For Home commodities,

Nota. The pound, of which the above Trone stone is composed, differs as under, viz.

In the parishes of Kirkcudbright, Rerick, Buitle, Kelton, Croismichael, Parton, Balmaghie, Tongland, Tynholm, Borue, Girlon, and Anwath, it consists of 28 oz. Avoirdupois.

In the parishes of Balmaclellan, Dalry, Carsfairn, and Kells, it consists only of 26 oz. Avoirdupois.

LANARKSHIRE.

Consisting of two districts, one called the UPPER WARD, comprehending LANARK; the other called the LOWER WARD, comprehending the city of GLASGOW.

LINEAL and LIQUID Measures,

As in the General Tables.

GLASGOW and LOWER WARD.

DRY Measure:

For Wheat; raised from the firloft, containing 2314.19 cubic inches.

Pint.

1.4 = Cap.

5.59 = 4 = Peck.

22.38 = 16 = 4 = Firloft.

89.52 = 64 = 16 = 4 = Boll.

The above firloft is = 1 firloft 1 pint 2 gills .5 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 1 peck 3 pints 16.7 cubic inches, English standard measure.

The above boll is 5.813 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.05813
 { English quarters, multiply by .53807

GLASGOW

GLASGOW and LOWER WARD, continued.

DRY Measure:

For Pease, and Beans; raised from the firlo, containing
3271.2 cubic inches.

Pint.

1.97 = Cap.

7.9 = 4 = Peck.

31.63 = 16 = 4 = Firlo.

126.54 = 64 = 16 = 4 = Boll.

The above firlo is = 1 firlo 2 mutchkins 2 gills 1.05 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 5 pints 14.3 cubic inches, English standard measure.

The above boll is 2.048 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.02048
 { English quarters, multiply by .76059

LANARK and UPPER WARD.

The standard firlo is the rule for Wheat, Pease, and Beans. Only, it is to be observed, that in place of measuring by the firlo, they use, for Pease and Beans, a two-peck dish or measure, which is one half of the firlo.

N

GLASGOW

COUNTY-TABLES.

GLASGOW and LOWER WARD.

DRY Measure :

For Oats, and Bear; raised from the firloot, containing 3339.4 cubic inches.

Pint.

2.01 = Cap.

8.07 = 4 = Peck.

32.294 = 16 = 4 = Firloot.

129.178 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 1 pint 1 mutchkin 4.62 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 13 pints 18.3 cubic inches, English standard measure.

The above boll is 4.176 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.04176
 { English quarters, multiply by .77645

LANARK and UPPER WARD.

The Oat-firloot contains 32 standard pints, which makes the Lanark boll 3.225 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03225
 { English quarters, multiply by .76936

The above Lanark boll is = 6 bushels 9 pints 30.8 cubic inches, English standard measure.

WEIGHTS

WEIGHTS in Glasgow.

As in the General Tables.

Trone. For Butcher-meat, Cheese, and Butter.

Scotch Troye, or Dutch. For all kinds of Meal,

Avoirdupois. For English Goods and Groceries.

WEIGHTS in Lanark.

Trone. { Reckoning 22 lb. Avoirdupois to the stone. For
Butter, Cheese, and Wool.

Scotch Troye, { For Meal, Manufactured Barley, Butcher-
or Dutch. { meat, and Iron.

Avoirdupois. For English Goods, and Groceries.

LINEITHGOWSHIRE

LINEAL and LIQUID Measures.

As in the General Tables.

The standards of Dry measure were, by act of parliament of 1618, committed to the custody of the borough of Linlithgow; and therefore Linlithgow measure, and Standard measure, are commonly understood and spoken of as one and the same thing; but the fact is otherwise. In Edinburgh, Linlithgow firlots are avowedly made above $1\frac{1}{2}$ per cent. larger than the legal standard. Linlithgow firlots, got from Linlithgow as standards, for the town of Perth, were found, by experiment of the weight of water which they contained, to be almost 3 per cent. the wheat-measure, and 4 per cent. the barley-measure, larger than the legal standard. Linlithgow firlots, in like manner, got from Linlithgow as standards, for Kinross-shire, were found to be, for wheat, above $2\frac{1}{2}$ per cent. and for barley, above 3 per cent. larger than the legal standard: what the deviation may be in other places has not been tried. The Edinburgh measure, marked as such, appears to be the only exact legal measure for corn; See the tables for Edinburgh, Perth, and Kinross.

WEIGHTS.

As in the General Tables.

Avoirdupois. { For Tanned Hides, Dressed Flax, Combed Wool,
and Groceries.

Scotch Troye, { For Butcher-meat, Iron, Rough Calf-Skins,
or Dutch. { Undressed Flax, and Meal.

Troine. { For Wool, Butter, Cheese, Rough Hides, and Tal-
low.

NAIRN.

NAIRNSHIRE.

LINEAL Measure,

Coarse Cloth, by a Yard of 38 inches.

Other articles as in the General Tables.

LIQUID Measure; raised from the pint, containing 111.676 cubic inches.

The above pint is = 1 pint 1 gill 1.81 cubic inches, Scotch standard measure.

To convert Nairn pints into Standard pints, multiply by 1.08.

D R Y Measure :

For Wheat, Pease, Beans, Rye, Ryegrass-seed, Oat-meal, and Barley-meal; raised from the firloot, containing 2680.221 cubic inches.

Pint of Nairn.

$1\frac{1}{2}$ = Lippie.

6 = 4 = Peck.

24 = 16 = 4 = Firloot.

96 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 4 pints 2 mutchkins 2 gills 4.64 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 3 pecks 15 pints 2.4 cubic inches, English standard measure.

The above boll is 21.976 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.21976
 { English quarters, multiply by .62318

For Barley; raised from the firloot, containing 3573.632 cubic inches.

Pint of Nairn.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloot.

128 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 3 pints 2 mutchkins 6.19 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 2 pecks 9 pints 14.4 cubic inches, English standard measure.

This boll is 11.483 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.11483
 { English quarters, multiply by .83091

DRY

DRY Measure, continued:

For Oats; raised from the forefaid Barley-firLOT, containing 3573.632 cubic inches.

Pint of Nairp.

2 = Lippie,
8 = 4 = Peck.
32 = 16 = 4 = FirLOT.
160 = 80 = 20 = 5 = Boll.

The above firLOT is = 1 firLOT 3 pints 2 mutchkins 6.19 cubic inches, Scotch standard measure.

The above boll is = 1 quarter 1 peck 3 pints 26.4 cubic inches, English standard measure.

The above boll is 39.354 per cent. better than Scotch stand-ard.

To convert it to { Standard bolls, multiply by 1.39354
English quarters, multiply by 1.03864

Black Oats are fold by the Pease-firLOT, reckoning 9 firLOTS to the boll.

WEIGHTS.

Scotch Troye, { For Beef, Pork, Hides, Hemp, Flax, Twine
or Dutch. { for nets.
For Meal, reckoning 9½ stons to the boll.

Trone. { For Wool, Butter, Cheese, Tallow, and other home-
commodities, the ston consisting of 21 lb. Scotch
Troye, and the pound of 21 Troye ounces.

Avoirdupois. { For Groceries, and Foreign Goods.
For Flour, reckoning 8 lb. to each peck, of a
boll of 16 pecks.

ORKNEYS

ORKNEYS.

In buying and selling foreign goods, and goods from other parts of Scotland, the ordinary measures and weights of Scotland and England are used. But the

WEIGHTS

For Barley, Oats, Malt, Meal, Butter, and Oil, payable by vassals to their superiors, and by tenants to their landlords, or delivered by these persons to merchants, are quite different from the weights used in any other part of the kingdom. They are originally from Norway. The instruments are called *Pundlars* and *Bysmars* (kinds of the steelyard), and the weights are called *Marks*, *Setteens* or *Lyfpunds*, and *Mails*.

The *Pundlar* is a beam of wood about six feet long, and about three inches in diameter at one end, tapering gradually to the other. A hook is fixed to the greater end for suspending the goods. About six inches from that end, a tongue and shears, like those on the beam of a balance, are fixed; and, at the upper end of the shears, there is a large iron ring, through which, when the instrument is used, there is put a cross-beam for suspending the machine; and this cross-beam is generally supported by two men on their shoulders. The *Pundlar* is marked with notches at proper distances, corresponding to, and exhibiting the weight, from three *Setteens* upwards, to twelve; and the weight of the commodity is ascertained by a stone of the weight of a *Setteen* hung upon the *Pundlar* by an iron ring, which may be shifted from notch to notch, till the tongue between the shears, as in a steelyard, discovers the instrument to be in equilibrio.

There are two *Pundlars*; namely, the *Malt-pundlar* and the *Bear-pundlar*: the first of which is understood to be the general weight. The weight signified by both have the same denominations; but those on the *Malt-pundlar* are comparatively one half heavier than those on the *Bear-pundlar*. Thus,

two

two Setteens on the Malt-pundlar are equal to three Setteens on the Bear-pundlar, and so on of the other pundlar-weights.

The Byfmar is a beam of wood about three feet long, whereof a little more than the half is a cylinder of about an inch in diameter. The remaining part of the beam, or but-end, is also cylindrical, but much thicker than the other, being about three inches in diameter. In the small end there is a hook, from which the goods are suspended. The small end is marked with iron studs, at unequal distances. These studs correspond to and exhibit the weight of the commodities weighed, from 1 mark to 24 marks, which make a Setteen or Lyspund. When the material to be weighed is hung upon the hook, the Byfmar is horizontally suspended in the bight or loop of a cord. The weigher holds this cord in his hand; shifting its place, until the material weighed equiponderates the but-end of the Byfmar, which serves as the counterpoise. When the instrument is thus brought to an equilibrium, the stud nearest the cord shows the weight of the commodity in marks. This instrument bears relation to the Malt-pundlar, that is, the weights on it are multiples of the Malt-pundlar.

All these instruments are very rude and imperfect, especially the Byfmar, which may be considerably affected by the manner of holding the cord. The manner of weighing, even on the Pundlar, may make a difference in the great weights, to the amount of six marks.

O

WEIGHTS.

WEIGHTS.

The weights are these.

Mark.

24 = Setteen or Lyspund.

144 = 6 = Meil on the Malt-pundlar.

3456 = 144 = 24 = Chalder or Last.

	Scotch.	Avoird.
	ft. lb. oz.	lb.
The above Mark, at a medium, =	0 1 4 =	1.3596
Setteen or Lyspund, =	1 14 0 =	32.6306
Meil on the Malt-pundlar, =	11 4 0 =	195.7836
Chalder or Last, =	270 0 0 =	4698.8165

To convert	{	Orkney Marks to Scotch Troye or Dutch pounds, multiply by	-	1.25
		Setteens or Lyspunds to Scotch pounds, multiply by	-	30
		Meils on the Malt-pundlar to Scotch stones, multiply by	-	11.25

The chalder of Bear, in Orkney, being 24 Meils on the Malt-pundlar, and 36 on the Bear-pundlar, measures, at Leith, from 18 to 20 bolls, according to the quality of the grain. It is also reckoned about 15 English quarters. But tho' weighing upon the Bear-pundlar ought to turn out as above; yet, in fact, it does not, and is worse for the buyer than weighing upon the Malt-pundlar, by about 3 per cent.

Weighing, by small weights, upon the Byfmar, is generally better for the receiver, than weighing great quantities upon the Pundlar; insomuch that a Setteen of Meal, upon the Byfmar, is frequently equal to two Scotch stones.

Bear is sometimes reckoned by the barrel, which is no proper or certain measure; but, in general, the chalder of Bear is reckoned about 29 or 30 barrels, which makes the barrel about 4 lyspunds 21 marks and 2 ounces, or 4.88 lyspunds.

Butter and Oil are also generally reckoned by the barrel, and should weigh neat $12\frac{1}{2}$ Scotch stones; that is about $6\frac{1}{2}$ lyspunds, or 16 marks.

The butter is packed up in half-barrels, which are made to hold 32 Scotch pints.

ZET.

ZETLAND.

WEIGHTS; for the same commodities as in Orkneys.

Mark.

24 = Setteen or Lyspund.

144 = 6 = Meil on the Malt-pundlar.

3456 = 144 = 24 = Chalder or Laft.

		Scotch.				Avoird.
		ft.	lb.	oz.	dr.	
The above Mark,	-	=	0	1	2 10 $\frac{2}{3}$	= 1.2689
Setteen or Lyspund,	=	1	12	0	0	= 30.4553
Meil on the Malt-pundlar,	=	10	8	0	0	= 182.7318
Chalder or Laft,	=	252	0	0	0	= 4382.5632

To convert	{	Marks to Scotch Troye pounds,	multiply
		by - - -	1.1666
		Setteens to ditto, multiply by	28.
		Meils to Scotch stones, multiply by	10.5

The Zetland chalder of Bear should be between 17 and 18 bolls.

The above account of the medium weights in Orkney and Zetland is taken from the proof in the process, at the instance of the Orkney vassals, against the Earl of Morton, in 1759.

PEEBLES-SHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

The pint of Peebles contains 104.64 cubic inches, which is
= 1 pint 1.24 cubic inches, Scotch standard measure.

DRY Measure :

For Wheat, Pease, Beans, and Rye ; raised from the firloot,
containing 2354.4 cubic inches.

Pint of Peebles.

$1\frac{1}{32} =$ Lippie.

$5\frac{5}{8} = 4 =$ Peck.

$22\frac{1}{2} = 16 = 4 =$ Firloot.

$90 = 64 = 16 = 4 =$ Boll.

The above firloot is = 1 firloot 1 pint 1 chopin 1.96 cubic inches, Scotch standard measure.

The above boll is = 4 bushels 1 peck 8 pints 9.5 cubic inches, English standard measure.

The above boll is 7.148 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.07148
 { English quarters, multiply by .54742

DRY

DRY Measure, continued :

For Oats, Barley, and Malt ; raised from the firloot, containing 3348.48 cubic inches.

Pint of Peebles.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloot.

128 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 1 pint 1 mutchkin .7 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 14 pints 21 cubic inches, English standard measure.

The above boll is 4.459 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.04459
 { English quarters, multiply by .77856

Nota. In sales of Oats and Barley, farmers give a boll to the score, except of seed-oats and seed-barley.

WEIGHTS.

Trone. { Reckoning 23 lb. Avoirdupois to the stone. For
 Wool, Cheefe, Butter, Hay, Coals, Tallow, and
 Hides.

Nota. Farmers, in selling Wool and Cheefe, give a pound to the stone.

Scotch Troye, { For Meal, Barley, Butcher-meat, and Iron.
 or Dutch.

Avoirdupois. For Groceries.

PERTH-

PERTHSHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

The Perth standard pint-jug contains 3 lb. $7\frac{1}{2}$ oz. Scotch Troye of water, or 104.344 cubic inches.

DRY Measure.

Firlots from Linlithgow are kept in the town of Perth as standards for this county. A new set, both for Wheat and Oats, got in 1774, were carefully tried in March 1778, and found to contain as follows:

For Wheat, Pease, and Beans; raised from the firLOT, containing 2262.96 cubic inches.

Pint of Perth.

$$\begin{aligned} 1\frac{91}{38} &= \text{Lippie.} \\ 5\frac{27}{84} &= 4 = \text{Peck.} \\ 21\frac{11}{16} &= 16 = 4 = \text{Firlot.} \\ 86\frac{12}{16} &= 64 = 16 = 4 = \text{Boll.} \end{aligned}$$

The above firLOT is = 1 firLOT 1 chopin 2 gills 1 cubic inch, Scotch standard measure.

The above boll is = 4 bushels 13 pints 13.3 cubic inches, English standard measure.

The above boll is 2.986 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.02986 \\ \text{English quarters, multiply by } .52616 \end{array} \right.$

Nota. The old Linlithgow wheat-firLOT for this county is not extant; but it is said to have been about $3\frac{1}{2}$ per cent. better than Scotch standard.

DRY

DRY Measure, continued:

For Oats, Barley, and Malt; raised from the firloot, containing 3339 cubic inches.

Pint of Perth.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloot.

128 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 1 pint 1 mutchkin 4.23 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 13 pints 16.7 cubic inches, English standard measure.

The above boll is 4.164 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.04164
 { English quarters, multiply by .77636

Nota. The old Linlithgow oat-firloot, still extant here, is only 1 mutchkin 3.29 cubic inches, or .93 per cent. better than Scotch standard; and since it was discovered that the new one is too large, several people have got their firlots rectified by this old one.

N. B. At Culrofs and Dumblain there are also standards of Linlithgow for Corn; but, in dealing with the neighbouring shires of Stirling and Clackmannan, the measures of these shires are given.

For Apples.

The oat-firloot, four of which heaped, or six striked, (that is apple above the brim), make the single boll. The double of this measure makes the boll by which the fiars are struck, called the *double boll*.

WEIGHTS.

WEIGHTS.

Avoirdupois. { Reckoning 16 lb. to a stone. For all Merchant-goods, Foreign or English.

Scotch Troye, { For Butcher-meat and Undressed Flax.
or Dutch. { For Meal, reckoning 8 stones to the boll.
 { For Coals, reckoning 40 stones to the boll, and
 16 bolls to the chalder.

Trone. { Reckoning 16 lb. each consisting of 22 oz. Avoirdupois to the stone For Butter, Cheese, Scotch undressed Lint, and Rough Tallow.

Nota At Culrofs and Dumblain the same weights are used; only the Trone stone, at these places, consists of 16 lb. of 20 oz. Scotch Troye each.

Though the Culrofs chalder, which was the standard for Coals, is now lost; yet, in the neighbourhood of Culrofs, coals are sold by two measures or carts, whereof

The larger contains 27 Trone, or $33\frac{3}{4}$ Scotch Troye stones, 12 of which carts, amounting to 405 Scotch Troye stones, are reckoned the Great Chalder.

The smaller cart contains 27 stone's Scotch Troye, 6 of which carts, amounting to 162 Scotch Troye stones, are reckoned the Small Chalder.

These dimensions are in the proportion of 5 to 2, as mentioned in the Scotch Book of Rates.

See General Tables, N^o 12. Coal Measure.

REN-

RENFREWSHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

As in the General Tables.

But the Ale-pint contains a gill more than Scotch standard.

DRY Measure :

For Wheat.

The Linlithgow standard.

For Beans, Pease, and Vetches; raised from the firloft, containing 2404.143 cubic inches.

Pease	Standard.
Jugs.	Pints.
$6\frac{3}{16}$	$= 5\frac{1}{16} =$ Pecks.
$24\frac{3}{4}$	$= 23\frac{1}{4} = 4 =$ Firloft.
99	$= 93 = 16 = 4 =$ Boll.

The above firloft is = 1 firloft 2 pints, Scotch standard measure.

The above boll is = 4 bushels 1 peck 14 pints 6.9 cubic inches, English standard measure.

The above pease-boll is 9.412 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.99412
 { English quarters, multiply by .559

N. B. Corn of all kinds is exported from Greenock and Port-Glasgow, by the Winchester bushel.

D R Y Measure, continued:

For Oats and Bear; raised from the firloft, containing 3405.869 cubic inches.

Pint. Ale-measure.

$7\frac{3}{4}$ = Peck.

31 = 4 = Firloft ftriked.

124 = 16 = 4 = Boll.

The above pint is = $1\frac{1}{16}$ pints, Scotch standard measure.

The above firloft is = 1 firloft 1 pint 3 mutchkins 3 gills, Scotch standard measure.

The above boll is = 6 bufhels 1 peck 5 pints 15.3 cubic inches, Englifh standard measure.

The above boll is 6.25 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.0625 \\ \text{Englifh quarters, multiply by } .791907 \end{array} \right.$

The Peafe-peck, heaped, is fometimes ufed for Oats and Bear.

W E I G H T S.

Avoirdupois. For Englifh Goods, and Groceries.

Scotch Troye, $\left\{ \begin{array}{l} \text{For Meal, 8 ftone to the boll; and} \\ \text{or Dutch. } \left\{ \begin{array}{l} \text{For Iron.} \end{array} \right. \end{array} \right.$

Trone. $\left\{ \begin{array}{l} \text{Reckoning the ftone 16lb. each pound being } 22\frac{1}{2} \text{ oz.} \\ \text{Avoirdupois. For Butcher-meat, Fifh, Cheefe,} \\ \text{Butter, and Tallow.} \end{array} \right.$

ROSS

ROSS and CROMARTY SHIRE.

LINEAL Measure.

The Scotch Ell for Home Manufacture, in Fortrose, is reckoned 38 English inches.

LIQUID Measure.

As in the General Tables.

Nota. There is a standard jug in Tain, said to be equal to the Scotch standard pint.

DRY Measure :

For Wheat, Rye, Pease, Beans, and Lime; raised from the firloft, containing 2481.696 cubic inches.

Standard Pint.

$1\frac{1}{2}$ = Lippie.

6 = 4 = Peck.

24 = 16 = 4 = Firloft.

96 = 64 = 16 = 4 = Boll.

The above firloft is = 1 firloft 2 pints 3 mutchkins, Scotch standard measure.

The above boll is = 4 bushels 2 pecks 7 pints 14.7 cubic inches, English standard measure.

The above boll is 12.941 per cent. better than Scotch standard.

To convert it to { Standard bolts, multiply by 1.12941
English quarters, multiply by .57702

Nota. Wheat of late is fold by the Linlithgow firloft.

Potatoes are fold by the heaped Wheat-firloft.

Flax-feed by the Scotch pint.

DRY Measure, continued :

For Oats, Barley, and Malt; raised from the firloot, containing 3308.928 cubic inches.

Pint.

2 = Lippie.

8 = 4 = Peck.

32 = 16 = 4 = Firloot.

128 = 64 = 16 = 4 = Boll.

The above firloot is = 1 firloot 1 pint, Scotch standard measure.

The above boll is = 6 bushels 9 pints 30.8 cubic inches, English standard measure.

The above boll is 3.225 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.03225
 { English quarters, multiply by .76936

WEIGHTS.

Avoirdupois, reckoning 16 lb. to the stone. For Butcher-meat; and for Wheat-Flour, reckoning 8 stone to the boll.

Scotch Troye, or Dutch. For Meal, reckoning 9 stone to the boll.

Trone, reckoning 21 lb. Scotch Troye to the stone. For Butter, Cheese, Tallow, Fish, and Flax.

Nota. In Tain, the Trone stone is reckoned 22 lb. Avoirdupois.

ROX.

ROXBURGHSHIRE or TEVIOTDALE.

LINEAL and LIQUID Measures.

As in the General Tables.

Nota. In Jedburgh, the standard pint-jug, marked anno 1556, contains above a gill more than the legal standard.

DRY Measure:

For Wheat, Pease, and Beans; raised from the firlo, containing 2274.888 cubic inches.

Standard Pint.

$1\frac{3}{8}$ = Forpet.

$5\frac{1}{2}$ = 4 = Peck.

22 = 16 = 4 = Firlo.

110 = 80 = 20 = 5 = Boll.

The above firlo contains 20 pints 1 chopin 3 gills, Jedburgh measure, which answers to 22 pints, or 1 firlo 3 mutchkins, Scotch standard measure. They also divide the firlo into 3 pecks, and that peck into 4 caps, which make a larger peck and cap than the above.

The above boll is = 5 bushels 1 peck 2 pints 17.3 cubic inches, English standard measure.

The above boll is 29.412 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.29412
English quarters, multiply by .66117

DRY

DRY Measure, continued :

In Kelfo market, the Wheat and Pease measure was formerly as in the preceding table; but of late they reckon by the Berwick boll, containing 4 firlots, which they hold to be 6 Winchester bushels, but which, in practice, is the same with the Berwickshire measure. They still divide their wheat-firLOT into 3 pecks, and the peck into 4 caps, called the *Kelfo peck* and *cap*.

For Oats, Barley, and Malt; raised from the firLOT, containing 3412.332 cubic inches.

Standard Pint.

$$2\frac{1}{6} = \text{Forpet.}$$

$$8\frac{1}{4} = 4 = \text{Peck.}$$

$$33 = 16 = 4 = \text{FirLOT.}$$

$$165 = 80 = 20 = 5 = \text{Boll.}$$

The above firLOT is = 1 firLOT 2 pints, Scotch standard measure.

The above boll is = 7 bushels 3 pecks 11 pints 26.3 cubic inches, English standard measure.

The above boll is 33.064 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.33064
 { English quarters, multiply by .99176

In Kelfo, the boll and firLOT are the same as above; but the firLOT is divided into 3 pecks, and that peck into 4 caps or forpets.

Nota. The Teviotdale boll of hummil Corn, Oats, and coarse Wheat-meal, is double measure.

WEIGHTS.

WEIGHTS.

Avoirdupois. For Groceries, and English Goods.

Scotch Troye, { For Fleth, Iron, Meal, Flour, and Pot Bar-
or Dutch. { ley.

Trone. { For Wool, Lint, Butter, Cheesc, Tallow, Raw Hides,
and Hay.

Nota. The stone of the above Trone weight weighs 24 lb. Avoirdupois, and consists of 16 Trone pounds, each pound weighing 24 oz. Avoirdupois.

In Kelfo, this stone weighs only 23 lb. Avoirdupois; but Sweet Butter, in the market, is sold by the above pound of 24 oz. Avoirdupois.

At St Boswal's fair, the Trone stone weighs 24 lb. 2 oz. Avoirdupois.

SELKIRKSHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

Nota. In Selkirk, a jug, equal to the Stirling pint, is kept as a standard.

DRY

DRY Measure :

For Wheat, Rye, Beans, and Pease ; raised from a standard peck kept in the town of Selkirk, containing, by gage, 1140.675 cubic inches.

Standard Pint.

$$1\frac{27}{32} = \text{Lippie.}$$

$$11\frac{1}{32} = 8 = \text{Peck.}$$

$$22\frac{1}{8} = 16 = 2 = \text{FirLOT.}$$

$$110\frac{5}{8} = 80 = 10 = 5 = \text{Boll.}$$

The above firLOT is = 1 firLOT 3 mutchkins 1 gill, Scotch standard measure.

The above boll is = 5 bushels 1 peck 3 pints 16.2 cubic inches, English standard measure.

The above boll is 29.779 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.29779
 { English quarters, multiply by .66305

For Oats, Barley, and Malt ; raised from a standard full kept in the town of Selkirk, containing 1615.685 cubic inches.

Standard Pint.

$$1\frac{61}{64} = \text{Lippie.}$$

$$15\frac{10}{16} = 8 = \text{Full.}$$

$$31\frac{4}{16} = 16 = 2 = \text{FirLOT.}$$

$$156\frac{4}{16} = 80 = 10 = 5 = \text{Boll.}$$

The above firLOT is = 1 firLOT 1 mutchkin, Scotch standard measure.

The above boll is = 7 bushels 2 pecks 28.7 cubic inches, English standard measure.

The above boll is 26.008 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.26008
 { English quarters, multiply by .93916

WEIGHTS.

WEIGHTS.

Scotch Troye, or Dutch. { Reckoning 17 lb. 8 oz. Avoirdupois to the stone. For Meal, Barley, Butcher-meat, Fish, and Iron.

Tronc. { Reckoning 23 lb. 8 oz. Avoirdupois to the stone. For Wool, Butter, Cheese, Raw Hides, Tallow, and Hay.

Avoirdupois. For English Goods, and Groceries.

STIRLINGSHIRE and CLACKMANNANSHIRE.

LINEAL and LIQUID Measures.

As in the General Tables.

Nota. The standard pint-jug is, by act of parliament 1618, committed to the custody of the borough of Stirling.

Q

DRY

DRY Measure.

That the legal standards might be the rule in this county for all sorts of Corn, the same were adjusted at Stirling, in August 1754, by the assistance of Dr John Stewart, Professor of Natural Philosophy in Edinburgh, and Mr James Gray of the Iron-Mill; and accordingly the standard is now much used for Wheat: but the customary measures for all grain are as follows, viz.

For Wheat, Pease, Beans, and Rye; raised from the firlo, containing 2378.292 cubic inches.

Standard Pint.

$1\frac{7}{8}$ = Forpet.

$5\frac{3}{4}$ = 4 = Peck.

23 = 16 = 4 = Firlo.

92 = 64 = 16 = 4 = Boll.

The above firlo is = 1 firlo 1 pint 3 mutchkins, Scotch standard measure.

The above boll is = 4 bushels 1 peck 11 pints 4.3 cubic inches, English standard measure.

The above boll is 8.235 per cent, better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.08235
English quarters, multiply by .55298

DRY

D R Y Measure, continued :

For Oats, Barley, and Malt; raised from the firloot, containing 3438.183 cubic inches.

Standard Pint.

$$\begin{aligned} 2\frac{5}{8} &= \text{Forpet.} \\ 8\frac{1}{2} &= 4 = \text{Peck.} \\ 33\frac{1}{8} &= 16 = 4 = \text{FirLOT.} \\ 133 &= 64 = 16 = 4 = \text{BOLL.} \end{aligned}$$

The above firloot is = 1 firloot 2 pints 1 mutchkin, Scotch standard measure.

The above boll is = 6 bushels 1 peck 9 pints 10.2 cubic inches, English standard measure.

The above boll is 7.258 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.07258 \\ \text{English quarters, multiply by } .79942 \end{array} \right.$

N. B. At Alloa, in Clackmannanshire, the practice is to give a peck to the boll, which makes such measure 13.961 per cent. better than standard.

Q 1

WEIGHTS.

WEIGHTS.

Trone. { The stone consisting of 20lb. 1 oz. Scotch Troye.
For Wool, Butter, Cheefe, Feathers, Rough Hides,
and Tallow.

Scotch Troye, { For Meal, (reckoning 8 stone to the boll),
or Dutch. { Butcher-meat, Hay, Coals, Iron, and Sal-
mon.

Avoirdupois. { For Groceries, Bread, Dressed Lint, and Dressed
Wool.

At FALKIRK.

Trone weight. For Butcher-meat.

SUTHERLANDSHIRE.

LINEAL Measure.

As in the General Tables.

LIQUID Measure.

As at Inverness; for which see the Table for that county.

DRY

D R Y Measure :

For Pease, Rye, and Beans ; raised from the firloft, containing 2585.1 cubic inches.

Pint.

$1\frac{9}{8}$ = Lippie.

$6\frac{1}{4}$ = 4 = Peck.

25 = 16 = 4 = Firloft.

100 = 64 = 16 = 4 = Boll.

The above firloft is = 1 firloft 3 pints 3 mutchkins, Scotch standard measure.

The above boll is = 4 bushels 3 pecks 3 pints 25.1 cubic inches, English standard measure.

The above boll is 17.647 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 1.17647
English quarters, multiply by .60106

Nota. The sale of Pease, &c. of the growth of this shire, is generally by the peck-measure. No cultivation of Wheat for sale.

D R Y

DRY Measure, continued :

For Oats, Barley, and Malt.

The measure most generally used for these grains is regulated by the barony-measures of the family of Sutherland, which were procured from Inverness. For these see the Barley and Malt measure of that county.

A firloft, containing 3546.719 cubic inches, is likewise kept by the dean of guild of Dornoch as a standard, and the measures arising therefrom stand as follows :

Pint of Inverness.

$$2\frac{1}{84} = \text{Lippie.}$$

$$8\frac{1}{8} = 4 = \text{Peck.}$$

$$32\frac{1}{4} = 16 = 4 = \text{Firloft.}$$

$$129 = 64 = 16 = 4 = \text{Boll.}$$

The above pint is = 1 pint 6.571 cubic inches, Scotch standard measure.

The above firloft is = 1 firloft 3 pints 1 mutchkin 5.1 cubic inches, Scotch standard measure.

The above boll is = 6 bushels 2 pecks 6 pints 7.5 cubic inches, English standard measure.

The above boll is 10.644 per cent. better than Scotch standard.

To convert it to $\left\{ \begin{array}{l} \text{Standard bolls, multiply by } 1.10644 \\ \text{English quarters, multiply by } .82465 \end{array} \right.$

WEIGHTS.

WEIGHTS.

Trone. { Reckoning 24 lb. Avoirdupois to the stone. For
Butter, Cheese, Tallow, and Wool.
Reckoning 21 lb. Scotch Troye to the stone. For o-
ther productions of the county.

Scotch Troye, } For Meal, reckoning $8\frac{1}{2}$ stoncs to the boll.
or Dutch.

Avoirdupois. For English Goods, and Groceries.

WIGTONSHIRE.

LINEAL Measure.

The Ell of 38 inches. For Green Linen.

Ell of 40 inches. For Raw Woolen Cloth.

Nota. To this last Ell 41 inches are commonly allowed.

For other measures, *See* the General Tables.

LIQUID Measure.

As in the General Tables.

DRY

DRY Measure:

Is raised from the Auchlet, a round vessel of 18 inches diameter within the brim, and 4 inches deep, the brim being $\frac{3}{8}$ of an inch thick. It is said to contain about 9 pints 13 gills; but by gage it contains about half a gill more: however, in practice, the boll, consisting of 16 auchlets, striked measure, is reckoned equal to 8 Winchester bushels; and, upon that ground, the measure will stand thus:

For Wheat, Pease, and Beans.

Standard Pint.

2.6 = Forpet.

10.4 = 4 = Auchlet striked.

166.4 = 64 = 16 = Boll.

The above boll is = 1 boll 3 firloths 17 pints 1 chopin 2 gills, Scotch standard measure.

It is precisely equal to an English quarter.

The above boll is 95.729 per cent. better than Scotch standard.

To convert it to Standard bolls, multiply by 1.95729

DRY

DRY Measure, continued:

For Oats, Barley, and Malt,

Is raised from the auchlet heaped, whereof 16 to the boll. By an experiment made, of what quantity of corn would lie in a heap upon a circular area whereof the diameter was $18\frac{3}{4}$ inches, the same was found to contain $5\frac{5}{16}$ pints, which would make the heaped auchlet to contain $15\frac{2}{16}$ pints.

But, in practice, the boll of 16 auchlets heaped is reckoned equal to 12 Winchester bushels; and upon that ground the measure will stand thus:

Standard Pint.

3.9 = Forpet or Dish.

15.6 = 4 = Auchlet heaped.

249.6 = 64 = 16 = Boll.

The above boll is = 2 bolls 1 pint 1 chopin 1 gill, Scotch standard measure.

The above boll is = 1 quarter 4 bushels, English standard measure.

The above boll is 101.254 per cent. better than Scotch standard.

To convert it to { Standard bolls, multiply by 2.01254
 { English quarters, multiply by 1.5

WEIGHTS.

WEIGHTS.

Trone. } Reckoning $26\frac{1}{2}$ lb. Avoirdupois to the stone. For
Butter, Cheese, and Wool.

Nota. In Whithorn, the stone consists only of 26 lb. Avoirdupois.

Scotch Troye, } For Meal, reckoning 16 stone to the boll.
or Dutch.

Avoirdupois. For Butcher-meat, and English Groceries.

Nota. The weights and measures of the parishes of Kirkma-
breck and Minigaff, in the stewartry of Kirkcudbright, are the
same with the above.

CON-

CONJECTURES

CONCERNING

The Ancient Standards of MEASURES and WEIGHTS in Scotland,

From the year 1124, when David I. began to reign, to the year 1618, in the reign of James VI. when the standards now in use were established.

IT is a matter of curiosity, and it is even of use for explaining the law and history of Scotland, to discover what were the original standards of measures and weights in that kingdom, and what variations were made upon them at different times by the legislature.

So far as can be learnt from statute-books, there appear to have been seven general regulations of measures and weights, besides many particular acts of parliament for explaining, amending, or enforcing them.

The first is the affize of King David I. made at Newcastle upon Tyne, without date, but which must have been between 1124 and 1153.

The second is in the reign of Robert I. which must have been between the 1306 and 1329.

The third is in the reign of Robert III. in 1393.

The fourth is contained in the 68th, 69th, and 70th chapters of the 4th parliament of James I. in 1426.

The fifth is contained in the 73d chapter of the 14th parliament of James II. in 1457.

The sixth is contained in the 115th chapter of the 11th parliament of James VI. in 1587.

The seventh and last affize is the general regulation which James VI. made in 1618, containing our present standards; of which an account has been given in the preceding General Tables.

THE only printed account of the three first affizes, namely, of David I. Robert I. and Robert III. is contained in the collection made and published in 1609, by Sir John Skene, of the *Regiam Majestatem*, and other ancient statutes.

There is no entire record now extant of these statutes in our registers; but there are, in the Advocates library, several MS collections of them, very ancient, which serve to explain the obscure passages, and even to correct the mistakes, in Skene's book.

Except as to the weight and value of money, concerning which it is not the present purpose to enquire, these three affizes appear to intend the establishing of the same weights and measures. How they should have continued unvaried, during so long a period as above 270 years, will seem the less surprising, when it is considered, that it was the great object of the chamberlain's-ayre, or circuit, observed in these ancient times, to maintain and enforce uniformity to the standards.

The first of these affizes, namely King David's, as we have it, appears very clearly to be only a copy of that affize repeated in an affize by Robert I.; for it includes expressly the variations which Robert I. made as to money: and the affize of Robert III. in like manner recites it, and includes these variations, adding other variations on money in Robert III.'s time.

For these reasons it is fit to state in one view the *substance* of these three affizes, as they appear from Skene's collection, collated with and corrected by the above-mentioned manuscripts, as follows.

W E I G H T.

By David's affize, — *the sterling or penny was to weigh 32 grains of good round wheat; — the ounce 20 sterlings or pennies; — and the pound 15 ounces or 25 shillings.*

By Robert I.'s affize, — *the pound and ounce continued the same; but, by the diminution of the money, the ounce weighed 21 sterlings or pennies, and the pound 26 shillings 4 pennies.*

By Robert III.'s affize, — *the pound and ounce continued the same; but the ounce, by the diminution of the money, came to weigh 32 pennies.*

By

By David's affize, (which does not appear to have been varied by the others),—*the stone of wax was to weigh 8 pounds, — the stone for wool, and other things, 15 pounds, — the waw 12 stones of 8 pound each.*— And,

In the affize of Robert III. it is mentioned, that 12 London pounds make a stone.

To Skene's account of the affize of King David, it is subjoined, that *the common and equal pondus Cathania* (which he translates the weight of Caithness) *shall be observed in buying and selling over all Scotland.* But this does not appear in the old MSS of David's affize. Skene repeats it verbatim among the statutes of David II.

The standard weight for buying and selling is set forth in the affize, and must therefore have been the common and equal weight for buying and selling at the trone or market: but upon what authority it is called *pondus Cathania* does not appear, as the county of Caithness is not known ever to have been a seat of commerce, or a pattern of police for other parts of Scotland.

King David was a wise and able prince, who applied himself assiduously to promote the welfare of his people; it is probable he borrowed his affize of weights and measures from England, where he spent his youth, and received his education.

This appears particularly in his weights, of which the penny, shilling, and ounce, are evidently the same as in England; though now, in place of 32 grains of wheat, they have substituted 24 artificial grains; and their silver pound contains only 12 ounces; whereas David's contained 15 ounces for silver, and every other thing. The ancient English pound for wool and other merchandises contained 15 Troy ounces, which is very little more than 16 Avoirdupois, and probably is the foundation of that weight.

It is remarkable, the origin of money-weight in England, Scotland, France, and other kingdoms, is derived from the weight of grain; and that the original weights were *three*; the penny, shilling, and pound; or the penny, ounce, and pound: whence it is not improbable that money-weight derived its name of Troy or Troye weight.

David's

David's weight, in a short view, will stand as in the following table.

Penny = 32 grains wheat.

20 = Ounce.

300 = 15 = Pound.

4500 = 225 = 15 = Stone.

English Troy.

Scotch Troye.

The above lb. = $1\frac{1}{4}$ lb. = 15 oz. 2.016 drops.

LINEAL Measure.

The length of the inch is the breadth of the thumb of a middle-sized man, measured at the root of the nail, taking the thumbs of three men for striking the medium; or, is the length of three barley corns without the tails. Like the English inch, derived from this beginning, the standard has remained unvaried to this day. The Scotch inch is commonly held to be to the English inch, as 1 is to 1.0,054, or is $\frac{1}{883}$ part longer than the English inch, and is so stated in the preceding General Tables. The foot of 12 inches.

The ell of 37 inches, or $3\frac{1}{2}$ feet.

The perch, *particata terra in baronia*, (that is, for the measuring of land in the country), is of 6 ells, or $18\frac{1}{2}$ feet.

In a burgh 20 feet.

From this account of the perch for measuring land, whereof 160 squared were reckoned to the acre, making it to consist of 5760 square ells, is derived the original of the Scotch acre, precisely the same as at present.

There is in one of the MSS of *Regiam Majestatem*, a separate account, making the foot consist of 12 inches, — the ell of 3 feet, — the perch of 5 ells, — and the acre to consist of 160 square perches; which would bring the acre only to 4000 square ells. But this account, as inconsistent with the other authorities, and with the affize stated in the preceding part of that very MSS, falls to be rejected, and leaves the state of lineal and square measure in David's time to have been precisely as at this day.

Measures of CAPACITY.

The gallon ought to weigh 12 lb. of divers waters, viz. 4 lb. of sea-water, 4 lb. of standing water, and 4 lb. of pure river water.

The depth $6\frac{1}{2}$ inches.

The circumference at the bottom 23 inches.

The diameter at the bottom, including the thickness of both sides, $8\frac{1}{2}$ inches.

The circumference at the brim $27\frac{1}{2}$ inches.

The diameter at the bottom is not given, neither is the thickness of the sides mentioned; but from the diameter given, it is evident the inside circumference is meant.

The boll contains a sextarius, that is 12 gallons; and is of the following dimensions,

The depth 9 inches.

The diameter at the brim, including the thickness of both sides, is 24 inches.

At the bottom $24\frac{1}{2}$ inches.

The thickness of both sides 1 inch.

The circumference at the brim 72 inches.

At the bottom 74 inches.

Though not mentioned, yet it is evident, from comparing the circumferences with the diameters given, that the inside circumference is intended.

Upon these data the contents of the gallon and boll, in cubical inches, may be ascertained.

First of all, the gallon by the weight of water. Sea-water is supposed about 3 per cent. heavier than river water, consequently the mixture of one third of it will make the 12 lb. of water 1 per cent. heavier than 12 lb. of river water; and, with this allowance, will make the gallon contain 331 Scotch cubic inches, supposed equal to 337 English.

2dly, As the diameters are not given, calculating from the two circumferences, the contents will be 337 English cubic inches, precisely the same as by the weight of water.

3dly, In like manner, the contents of the gallon, calculated from the given diameters of the boll, after deducting an inch for the thickness of the sides, will be 318.4 cubic Scotch inches, or 323.6 English.

4thly,

4thly, From the given circumferences of the boll, the contents of the gallon will be 318 cubic Scotch inches, or 323.2 English.

These four different ways coming all so near to one another, are satisfying evidence, not only that one or other of them exhibits the true contents of King David's gallon, but also that the preceding account of his lineal measure and weight, which mutually serve to investigate and check each other, is agreeable to the truth, and that they have remained unvaried to this day.

The account by the weight of water tallying so exactly with the dimensions of the gallon, is probably the most just; and therefore the table of his measures of capacity will stand as follows.

English cubic inches.

337 = Gallon.

4044 = 12 = Boll.

This boll is = 39 pints 1 gill 4.78 cubic inches, Scotch standard measure.

It is = 1 bushel 3 pecks 8 pints 11.9 cubic inches, present English standard measure.

N. B. In the affize of James I. the weight of David's gallon is said to be 10 lb. 4 oz. which account, if to be relied upon, would only go to presume James's Troy weight heavier than David's, besides the additional ounce to the pound. But this is improbable; and there are so many obvious blunders and miscalculations in the act of James I. particularly where it speaks of David's gallon, that it is probable, in place of 10 lb. 4 oz. we should read 11 lb. 4 oz. which will make it agree with David's affize.

LIQUID

LIQUID Measure; raised from the gallon, weighing 12 lb. of the different sorts of waters before mentioned.

English cubic inches.

14.041 = Third part.

42.125 = 3 = Pint.

84.25 = 6 = 2 = Quart.

337 = 24 = 8 = 4 = Gallon.

1011 = 72 = 24 = 12 = 3 = Sextern of wine.

4044 = 288 = 96 = 48 = 12 = 4 = Sextern of ale.

The above gallon is = 1 quart 5 mutchkins .937 cubic inches, present Scotch standard measure.

It is = 1 gallon 3 pints 19.375 cubic inches, present English wine-measure; or 1 gallon 1 pint 19.75 cubic inches, present English ale-measure.

N. B. In Skene's edition of the Affize of wine, a *dolium* is mentioned, but the capacity of it seems uncertain; for it is there declared, that when the *dolium*, which he translates *puncheon*, was sold for 20 s. the gallon should be sold for one penny; and so proportionably when the *dolium* is sold for 30 s. or 40 s. &c. But in several of the manuscripts, it is declared, that when the *dolium* is sold for 20 s. the gallon shall be sold for two pennies, and so proportionably, &c.

The Weights and Measures of James I. according to the 68th, 69th, and 70th chapters of his 4th parliament, in 1426.

Like King David, James I. did, in the beginning of his reign, apply himself to the regulation of the weights and measures; and it appears, that in the 1426 he had them

S

fettled

settled by an affize. In applying figures to this affize, as transmitted to us in the printed acts of parliament, it was found, that the dimensions of the several measures did not answer to the account given of their contents, and that they were inconsistent with one another. The dimensions, for instance, ascribed to the firlo, make the contents thereof greatly to exceed the weight of water which it is declared to contain; and though the boll is declared to contain only 4 firlo, yet by its dimensions, as in the act, it turns out between six and seven times larger than even the over-sized firlo there described.

This led to an inspection of the records, where it appears, that the depth of the firlo, in place of 9 inches, as in the printed act, is only 6 inches; and that the depth of the boll, in place of 19 inches, as in the printed act, is only 9 inches.

Farther, one of the copies in the record (for there are two) makes the stone to contain 16 lb.; though, in the other copy, and in the printed act, the stone is made to contain only 15 lb. But it is presumed the first account is the right one; because, as all the copies agree, that an alteration was made in the pound, by adding an ounce, so from analogy it may be presumed a pound was added to the stone.

Though these corrections on the boll and firlo bring them nearer to one another, yet they do not make them agree, owing surely to bad coopers, or miscalculation. They afford, however, an opportunity of forming a probable conjecture, which cannot be very wide of the truth, and exhibit James I.'s dry measures in a different light from that in which they have been hitherto understood.

LINEAL Measure,

The Ell of King David, as containing 37 inches, is expressly referred to and confirmed.

LIQUID

LIQUID Measure.

The pint is declared to contain, of the water of the river Tay, 41 oz. Troy. These ounces must be presumed to be the same with David's, namely English Troy, and the presumption is supported by a comparison of the weight of water with the dimensions of the firloot. This pint is considerably larger than David's; and the table will stand thus:

English inches. Scotch Troye oz.

77.695 = Pint. = 41.344, or 41 oz. 164 gr.

621.56 = 8 = Gallon.

This pint is = 3 mutchkins .142 cubic inches, present Scotch standard measure.

DRY Measure.

It appears, that between the time of King David, and that of James I. custom had greatly enlarged the dry as well as the liquid measures. The assize of James declares, in substance, *That the boll shall be divided into 4 firlots, and that the firloot shall be a medium between the old and the customary measures.*

The dimensions of the dry measures being corrected as above mentioned, stand thus: *The diameter of the firloot 16 inches, and the depth 6 inches; — the diameter of the boll at the brim 27½ inches, and at the bottom 29; — the depth 9 inches.*

After declaring these to be the dimensions of the boll and firloot, the act proceeds to say, *That the firloot consists of 17 pints, each pint containing, of the water of Tay, 41 oz. Troy; and that thus the water in a gallon weighs 20½ lb. — in a firloot, 41 lb. — and in a boll 164 lb.*

Here are several inconsistencies: for, according to the above dimensions of the firloot, it contains 1226 English cubic inches, or 15.78 of the above pints; whereas, according to the given dimensions of the boll, a firloot or ¼ of the boll contains 1433 English cubic inches, or 18.44 pints.

Again, if the weight of water contained in the firloft as mentioned in the act, be 41 lb. and each pint of water weigh 41 ounces, the firloft should contain only 16 pints, though the act exprefsly fays, it contains 17 pints.

In the midft of thefe inconfiftencies, it appears clear enough, that it was truly intended the firloft should hold 16 pints; but that upon experiment it was found to hold 17 pints, which may therefore be taken as the medium ftandard between the contents of the firloft and boll, according to dimensions; fo the table will ftand thus.

English cubic inches.

77.695	=	Pint.
660.4075	=	8½ = Half-firloft.
1320.815	=	17 = 2 = Firloft.
5283.26	=	68 = 8 = 4 = Boll.

The above firloft is = 2 pecks 1 lippie 3 mutchkins 7.263 cubic inches, prefent Scotch ftandard wheat-meafure.

The above firloft is = 2 pecks 7 pints 10.4 cubic inches, prefent English ftandard meafure.

The above boll is 39.89 per cent. lefs than the prefent Scotch wheat-meafure.

WEIGHT.

		Scotch Troye.	
		St.	lb. oz. drops.
Ounce	= English Troy oz.	=	— — 1 0.134
16 = Pound		=	— 1 — 2.151
16 = Stone		=	1 — 2 2.416

Nota. Some have imagined, that the Troye weight in James I.'s affize, means the modern Trone weight; but this fuppofition is not only contrary to the exprefs words of the act, but alfo it will not reconcile any one of the inconfiftencies in it. Thefe inconfiftencies remain the fame, whatever weight is fuppofed. 2dly, This fuppofition would add one fourth part to James I.'s firloft, which is perfectly inconfiftent with the given dimensions thereof, and even with the dimensions of his boll.

The

The Weights and Measures of James II. agreeable to the 73d chapter of his 14th parliament, in 1457.

LINEAL Measures and WEIGHTS.

The same as David's.

LIQUID Measures.

The same as those of James I.

DRY Measures of CAPACITY.

It is probable, that the disconformity between the firloft and boll of James I. induced the legislature, in James II.'s time, to make a new affize, and to enlarge the firloft so as to contain one fourth part of James I.'s boll. Accordingly, the act of James II. declares, that the firloft *shall contain* 18 pints; for that end the diameter is increased, and is made $16\frac{1}{2}$ inches. The depth is not mentioned; therefore it must be presumed to be the same as that of James I.'s firloft, namely 6 inches. But in this firloft also, as in that of James I. the dimensions fall short of the intention, and produce only, of solid contents, 1282.95 Scotch cubic inches, or 1303.85 English, making 16.78 of James I.'s pints.

The

The error in the dimensions must have been owing to unskilful gaugers; and therefore, as the act declares that the firloot did in fact hold 18 pints, the table will stand thus.

English cubic inches.

77.695 = Pint.

699.255 = 9 = Half-firloot.

1398.51 = 18 = 2 = Firloot.

5594.04 = 72 = 8 = 4 = Boll.

The above firloot is = 2 pecks 2 lippies 3 gills 5.79 cubic inches, present Scotch wheat-measure.

The above firloot is = 2 pecks 9 pints 20.9 cubic inches, English standard measure.

The above boll is 36.354 per cent. less than the present wheat standard Scotch measure.

The Weights and Measures of James VI. according to his first assize, contained in the 115th act of his 11th parliament, in 1587.

From the time of James II. till 1587, no alteration was made upon the standards. In that year the report of certain commissioners for that purpose, by parliament appointed, was approved of and confirmed.

This report sets forth, *in substance*, That the commissioners had considered the several laws concerning mettes, measures, and weights, and the perfect grounds upon which these laws had proceeded, namely, mutual comparison: — That they found,

That the ell committed to the custody of Edinburgh, contained 37 inches.

That

That the stone contained 16 lb. Trois, each Trois pound containing 16 oz.

The pint of Stirling contained 2 lb. 9 oz. Trois weight of clear water.

But that having tried, by the ellwand, the dimensions of the firlo, which by the act of James II. is said to contain 18 pints, and having tried it also by the pint-stoup of Stirling for the quantity and weight, they had found it less than it ought to be by error of the printer; for that by just calculation and comptrollment, it extended to 19 pints and a jucat.

They also found, That malt, bear, and oats, had been in use to be sold by heaped measure, and that the heap was a third part of the measure. They were of opinion that all kinds of victual should be sold by straiked measure, as had been the custom for wheat, beans, pease, meal, and white salt; but that in measuring of oats, barley, and malt, three straiked measures should be allowed for two heaped.

This report was approved of; and the firlo was appointed to contain 19 pints, and 2 jucats, and to be of the following dimensions, viz. the diameter $18\frac{1}{2}$ inches, and the depth $7\frac{1}{2}$; the peck to be in proportion; and the standard firlo was to be in the custody of the burgh of Linlithgow. Applying figures to these dimensions of the firlo, the contents turn out to be 1975.6 English cubic inches, which, instead of 19 pints 2 jucats (supposed gills) of James II.'s measure, make no fewer than 25.42 pints of that measure.

It appears, *imo*, There is no error in the printed edition we have of James II.'s act, which is agreeable to the record. *2do*, An error in the print, of 18 in place of 19, will not reconcile the matter, as 19 of James VI.'s pints are about 25 of James II.'s.

The difficulty therefore seems unfurmoutable, unless it is supposed, that after James II.'s time, both liquid and dry measures of capacity had been gradually increased by custom; and that, whether by intention or by mistake, the persons employed by the commissioners to make trial of the several measures, had either neglected to try the weight of water in the pint, taking it for granted that the pint was no heavier than in James II.'s time; or in trying it, instead of using the Trois pound of 16 oz. had used the Trone weight, whereof the pound, in Sir John Skene's time, was accounted to weigh $19\frac{1}{2}$ Trois ounces.

This would bring the pint of 1587, instead of 41, nearly to 50 Trois ounces, or 94.75 English cubic inches; which is still somewhat short of what it should be agreeable to the dimensions ascribed to the firlo in the preceding affize, according to which the liquid measure will stand as follows.

English

English inches.

103.4 = Pint.

827.2 = 8 = Gallon.

The above pint is equal to the present Scotch standard pint.

D R Y Measure.

English inches.

103.4 = Pint.

$4\frac{2}{3}$ = Peck.

1977.6 = $19\frac{1}{8}$ = 4 = Firloot.

$76\frac{1}{2}$ = 16 = 4 = Boll.

The above firloot is = 3 pecks 2 lippies 1 chopin 3.2 cubic inches, present Scotch standard wheat-measure;

Or = 3 pecks 10 pints 28.8 cubic inches, English standard measure.

The above measure is 10 per cent, less than the present Scotch standard wheat-measure.

Thus stood the weights and measures till 1618, when the present standards were established, as set forth in the preceding General Tables.

As to the affize in 1618. nothing need be added, but that parliament fixed their standards of weight by the French Troy, rather than the English; probably because in the former 16 oz. go to the pound, according to what had been the custom in Scotland.

They discovered the error in the weight of water contained in the pint, which they kept as they found it; and they settled the proportion between the pint and firloot, which by that time it would seem had been enlarged; though, as was formerly mentioned, they fell into a mistake as to the dimensions of the firlots, in making these dimensions short of what was necessary to contain the number of pints which the firlots did actually contain.

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